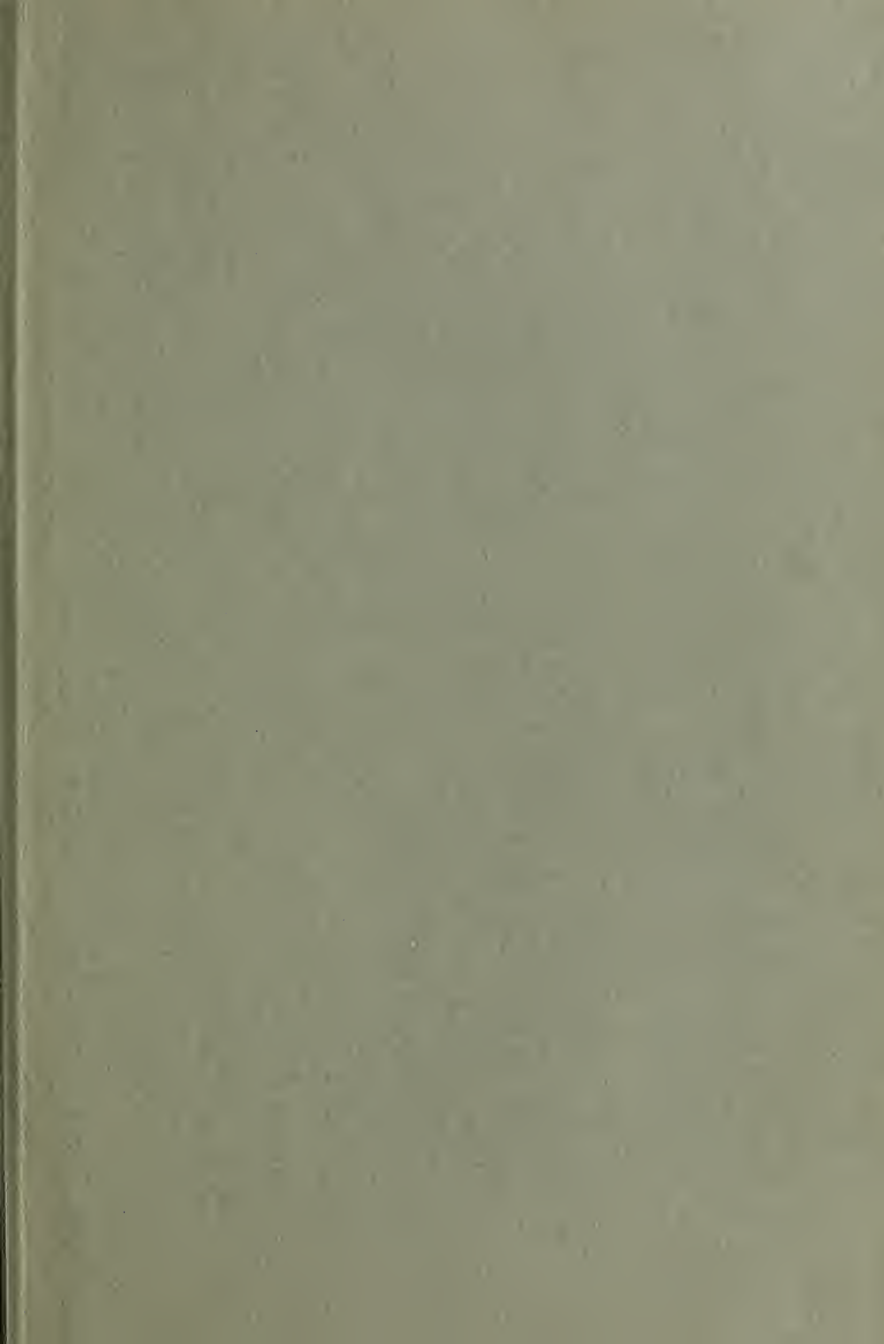
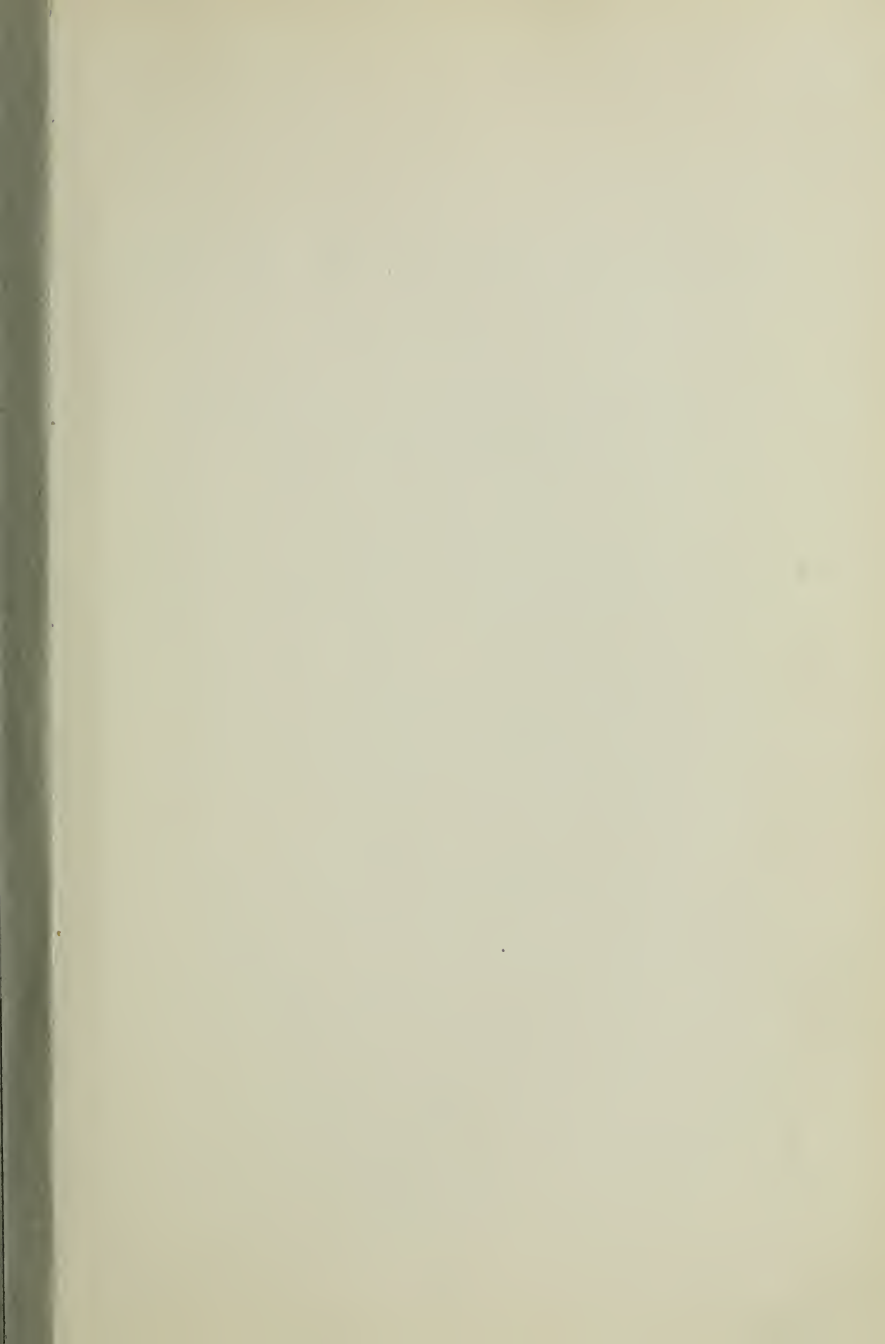
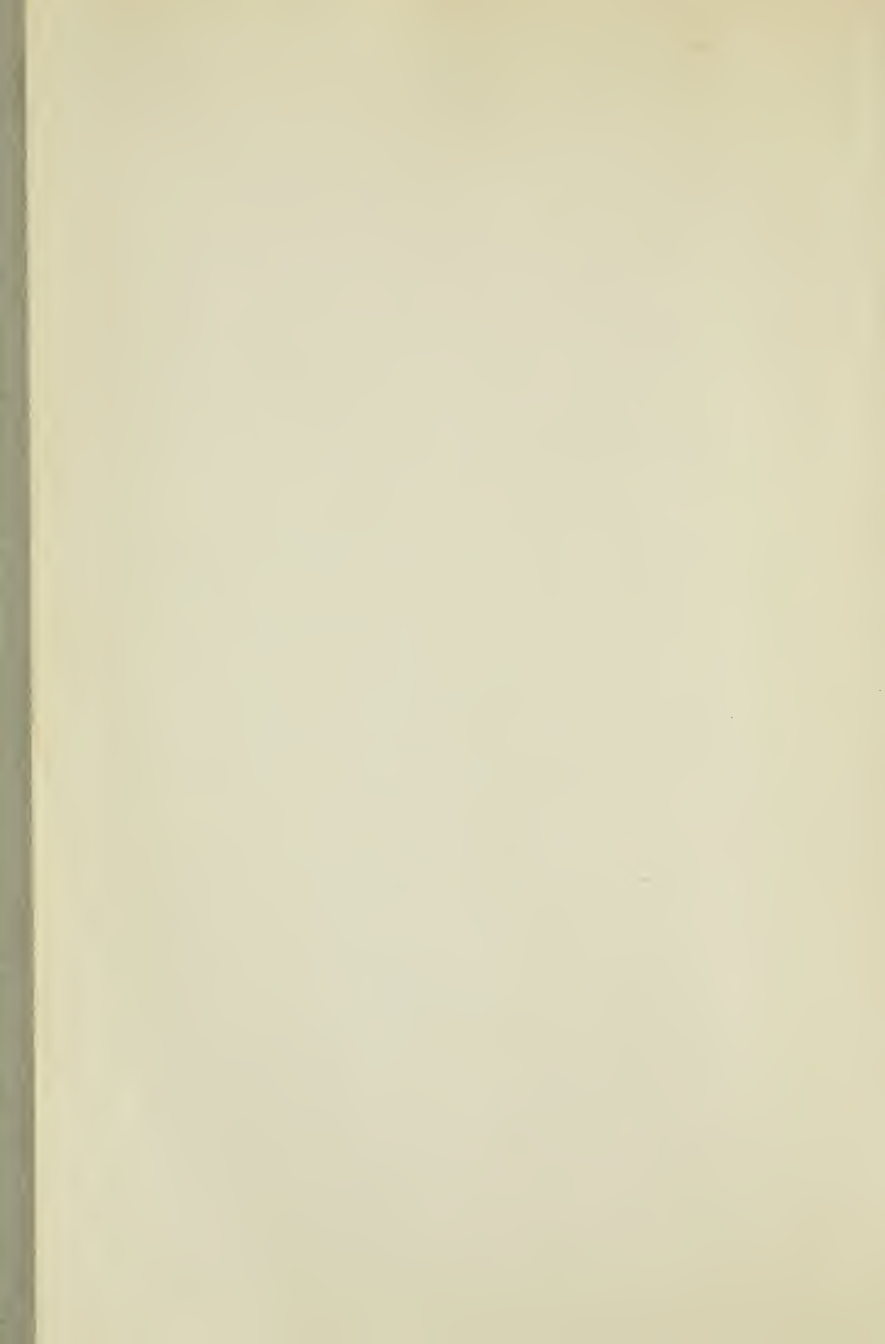


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STUDIES IN THE LEADING OF TROOPS

BY

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Regiment (3d Pomeranian).

VOLUME I.

The Infantry Division as a Part of an
Army Corps.

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1906.



OCT 16 1906

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PREFACE.

In order to develop and direct the war strength of a nation, we must have commanders, and we must educate them. While their education should in the main be of a practical nature, yet there is no question but that it must go hand in hand with a theoretical course of study.

Nor can we lose sight, at the outset, of how little time for theoretical preparation is available to one of the military profession.

He who lays claim to culture cannot dispense with a general scientific foundation, to be followed by a professional education. While the former almost wholly occupies the school-year period of a young man, his practical education should nevertheless begin as soon as possible. It is for this reason that with cadets in military schools, public or private, professional instruction can strive only for limited results, a condition detrimental to the most important subject of their study—Tactics. Furthermore, the field of Tactics is too large and too intricate to allow the beginner to go over it thoroughly during this period. As a consequence, we find it practicable to treat in detail only minor situations in which he may have to act at the outset of his army career, outside of which we must be content with a general illustration and superficial knowledge.

Although education continues after officer's rank has been attained, yet an officer's career admits generally of only an imperfect filling of the existing void. *Although military education is at present chiefly promoted by the performance of actual duties, this alone is not sufficient.* In addition, we need intelligent guidance, and no one will deny that practical training will bear better fruit if it proceeds simultaneously with a progressive theoretical education. Charged with this duty in

the most comprehensive manner is our highest military educational institution, the Royal War Academy, which was indeed established especially for this purpose. It would be well if all young officers could attend it, but under existing conditions this is impracticable, and only a small number enjoy its benefits. If, upon completion of their academic course, its students should imagine that their education was completed, it would utterly fail in its mission. One of the most precious fruits that mature there is the knowledge that is gained by the combination of incessant practical work and progressive theoretical education, and this enlarged knowledge ought to enable the student thereafter to continue his progressive training by his own efforts, as it furnishes him a guide for the accomplishment of this end in the most efficient manner.

With officers who, on the other hand, remain permanently in active service with troops, opportunities for further theoretical education are incomparably more unfavorable. Their demands allow them but a few free hours, and these are needed for recreation, leaving little time for strenuous mental labor. Nevertheless much encouragement is offered even here—scientific lectures, theoretical service compositions in winter, the war-game, and practice rides are some of the expedients, all of which will be more useful in proportion to the zeal displayed in their pursuit and the skill with which they are conducted. Yet a thorough, coherent course of study by these means is hardly practicable, and we must depend principally on the *personal diligence of the individual officer*. Here the young officer especially needs guidance and help, so that he may use his time to the best advantage and avoid getting on the wrong road in this difficult field. Military history, doubtless the best preceptress for every one who is duly prepared to enter her school, is dangerous company for one not yet so prepared. Tactical text-books, whose literature is indeed extensive, are therefore all that is at the command of the young officer for his progressive training.

We do not at all mean to belittle the value of tactics in its past forms. It has been of the greatest importance for all who devote themselves to the study of the art of war, and we owe it much. Notwithstanding this, the number of students who have been led astray, or never would have reached

their goal without the tried teachers who assisted them or the helping hand of experience, is legion. *The novice* in the field of martial knowledge cannot, at this day, dispense with the study of elementary or applied tactics, and it is therefore insisted that text-books should adapt themselves to the needs of our times. I rebel against the absolute authority with which tactical text-books have for centuries ruled our entire scientific education, and I maintain that *the progressive training of the officer* may be accomplished in more thorough and practical ways than those we have so far pursued.

In support of this assertion note the following: Many sciences serve as a basis for the employment of troops in war, while troop-leading is an art in itself. Although the material required in its service is subject to relatively minor changes, the problems it is called upon to solve are of such a varied nature that it becomes impossible to compress them within fixed boundaries. So-called *applied tactics* certainly attempts this, yet both it and *strategy* appear on the field of military science as the parts which, in view of their aim, should least assume a purely scientific character.

We may certainly strive to gain our object in different ways, and if we would derive real benefit from applied tactics, we will be successful if it *prepares us, as far as possible, outside of real practice, for troop-leading in war, or to become its useful organs* (general staff officers, adjutants, or aids).

It is in reality not so important that one should be competent to *prepare a good treatise* on a given theme, as that he should be able to *act intelligently* in a case before him. Above all, the first result is produced by the scientific treatment of applied tactics, while to perform the latter, if he would play his part well, *the student must be trained*. In the same manner, scientific treatment must wrestle with the disadvantage already pointed out, that the nature of war cannot be restricted to distinct subdivisions; should we attempt this, the great mass of conditions under which we give battle could only be roughly disposed of. But certainly in most cases these conditions do govern, and exert a powerful influence. Instead, however, of taking them into account, applied tactics gives a preponderant value to *terrene*; their entire arrangement is often based on the latter alone. It describes wood, village, and defile com-

bat, the passage and defense of rivers, the struggle for a height, actions in the mountains or on the plain. By these means scientific treatises are built up, which, like all similar compositions, culminate in abstract propositions, and create a desire to give a *rule for everything*, going absolutely too far in that direction.

Considering applied tactics from the standpoint of its relation to *terrane* and rules, so characteristic of it, we observe the following points, both from its historical development and its substance:

The combat theory of the eighteenth century, which still prevailed to some extent at the beginning of the nineteenth, placed a preponderant value on *elementary forms* and an extremely limited value on *terrane*. Thus, we find in Tempelhoff's "History of the Seven Years' War" such words as these: "The village itself must be cleared in order that two battalions may march through it in line; otherwise it cannot be defended." The wars of the French Revolution caused a violent upheaval in this field; any *terrane*, if at all practicable, was entered, and in course of time formations necessary for this were gradually developed. Thus the *terrane* acquired greater importance than ever before, which again illustrates the fact that every innovation, as soon as it proves of actual value, gains at the start at least an importance far above its intrinsic worth. There was a time when disputes arose as to whether a battalion should defend a mountain or the mountain defend the battalion. These aberrations were certainly soon overcome, but the echoes remained, although perhaps in an altered manner, and in most military dogmas the nature of *terrane* still plays the most prominent part. Although, however, we certainly cannot question its high value, yet, as a rule, *terrane* is only secondary; *far more important than any consideration in grand tactics are nearly always the conditions under which we give battle*—we fight for a village, a height, a wood—in fact, for any locality, as we find it, though often in a different manner, yet *always according to the means at hand or the object of the combat*.

The object for which we fight must never be regarded as of secondary importance: it cannot be dismissed with the remark that it belongs to the realm of strategy. Scientific treat-

ment has forced a division into tactics and strategy, and has thus set up two distinct ideas inseparable from the *independent action* of a commander. We can never consider separately the questions, *Under what conditions must we fight?* and, *If we must fight; how shall we proceed?* The former determines the latter, and he who is taught only the latter will be robbed of an element in his instruction without which no commander, from lieutenant to commander in chief, can *independently act* to best advantage.

As to *rules*, we can accord them only limited importance, for we are able to apply them only so far as we can overlook and absolutely control existing conditions. There may be rules (or rather, *principles*) for the arrangement of marches, in so far as these dispositions are applicable to our own troops; rules for the establishment of outposts; or rules determining upon what visible objects a battery should fire under various circumstances; but for conducting an engagement on a large scale no rules can be given—there they become simply phrases, for we can then neither overlook all conditions nor absolutely control them.

In war, rules that shall govern under all conditions, must necessarily shrink to axioms, as in mathematics, where we say that things equal to the same thing are equal to each other. If they are to signify any more than this, then every new condition must involve a new exception. The rule may enjoin us to occupy the strong line, while the particular situation compels us to go beyond it; the rule may direct us, because we are stronger, to fight, but we retreat, for we are needed more in another place. The decision must be deduced from the concrete case; the rule may apply in one instance, but in another it is faulty. Exact science rests upon a case already demonstrated, out of which we deduce a second, and so on, building up a system; but practical life, and war above everything else, must reckon with ever-varying, even incalculable, quantities; indeed, all it can foresee is the next immediate occurrence, and even this but incompletely, and can infer no second beyond it.

In spite of this, we often find in texts on strategy and applied tactics sentences like these: "Concentrate your forces on the enemy's weak point"; or, "If the enemy does this, you

must do that." What becomes of the nature of war then? The enemy will hardly be obliging enough to tell us his strength, his intentions, or how he proposes to accomplish his intentions. Much of this we only find out in the course of action, often in a very surprising manner; more we learn when the fight is over; but most turns up in military history, years afterwards. At Skalitz, even after the battle was over, the Eighth Austrian army corps placed too high an estimate on the strength of its opponent, believing it had encountered two Prussian corps. Even after the campaign was over, similar mistakes were made by the Sixth Austrian corps, and by Wnuck's cavalry brigade at Nachod. A hundred examples might indeed be cited from the engagements in 1866, where portions of both sides erred in judging the strength and intentions of their opponents, until the official narrative cleared up the situation.

The cause of all this is simple—each side endeavors to conceal from its opponent whatever it does. The leaders and the cavalry patrols in war cannot ride into the enemy's skirmish line in order to obtain information.

When the nature of war is therefore such that everything on the enemy's side appears uncertain and often unknown, and on our own side a wide range of misunderstandings and errors (all that we call friction) develop, where shall we apply a rule? In war twice two is not always four. We can never tell whether we should apply a rule, or make an exception. Consequently, in this fluctuating field, all that is left for us is an appeal to our own resources. *Definiteness as to what we propose to do and resolute execution of our intentions*—these are the pilots that carry us over dangerous obstacles. And for this reason it is that military virtue is rooted infinitely deeper in character than in scientific attainments.¹

¹This thought always reminds me of the engagement at Nachod. It was my first time in action. Things looked dubious for a time on the plateau of Wenzel Hill. Companies of the advance guard, and a battery, were falling back, while the columns of the main body were hurriedly moving up the mountain pass below. The situation had become critical; if the Austrians should succeed in getting a firm foothold on the hill, the debouchment of the corps would in all probability be frustrated. During a pause, which permitted calm reflection, I pondered all the theories concerning debouching

We will hope that military sciences may ever retain their high importance, and that applied tactics, scientifically treated, may also yield great profit, despite the fact that they will not be sufficient in this form for a *practical education in troop-leading*. For here we have a real void, the filling of which is doubtless necessary. This can be accomplished only by a *System of Troop-leading*. As a consequence Tactics and Strategy will most certainly lose the importance which, in the theoretical field, has up to this been accorded them in an unlimited degree—they will only retain their place as an introduction to the education of commanders.

A system of troop-leading, framed in such a comprehensive manner that it may serve as a guide for every commander, has become a necessity. We do not yet possess it.

If we approach the problem more closely, we must answer two questions at the outset: *What is to be taught here?* and *How shall it be taught?*

We cannot ignore the fact that entirely different problems fall to the lot of different commanders, in peace as well as in war. During peace, for example, the company commander must instruct his non-commissioned officers; the regimental commander is responsible for the instruction of the commissioned officers. In the company the training consists principally in preparing the individual for the combat; in the battalion we have the co-operative action of the lowest tactical units. Subordinate commanders are charged with detailed training and immediate execution; as we go higher more leading is demanded.

In like manner material distinctions are seen in war-time. The care for the subsistence of a company requires measures differing from those necessary in the case of a division. Problems given to a platoon are very different from those given to a regiment or army corps. The lieutenant posts his picket,

out of a defile that I could recall from text-books. Not one fitted the case before me. I cast them aside, and asked myself, "What is the real issue here?" The answer came spontaneously: "The advance guard on the height must do its best to hold it, while the columns of the main body coming up the valley must try to reach it as soon as possible and take part in the action where the fight is retrograding." From that hour dates my aversion to tactical rules.

the battalion occupies an outpost line, the platoon can prepare itself for defense in a farm-house, while the defense of a village devolves upon a battalion.

Much of what it is necessary to learn is common to the entire gradation of commanders, but the view differs from every round of the ladder. What use is there in a subaltern's studying only the operations of armies or the conduct of battles? He should be interested rather in speculating on what situation he might find himself in when in the field with his platoon, or at the head of a company if his captain should fall, or even in charge of a battalion. It is therefore essential that he should at first limit his studies, and above all that he should make clear to himself the conditions he must meet in such cases, before he approaches the study of grand tactics in a comprehensive manner.

A theory of troop-leading should therefore start with the lowest divisions, commencing with the platoon or the company; it ought to include the entire gradation of the military hierarchy, up to the command of an army. An auxiliary scheme might cover the education for special functions, of the aides-de-camp, of the general staff officers in their various positions, of the supply departments, and of the hospital corps, in an analogous manner. In some of these branches we already have excellent text-books. On company duties, too, we have some for non-commissioned officers. The value of these is universally acknowledged. Why should we not build higher? The more the demands of the various positions are in time increased, the greater will be the necessity for thorough instruction. It is no longer possible for a single person to master the entire range of military knowledge and skill, and consequently all the more necessary is it that we should take up, on a general foundation, those problems the solution of which practical life may demand of the individual according to his station. A work covering the whole range of troop-leading with regard only to special requirements of war cannot be compiled by one man; besides the time required, it would call for such a mass of practical experience and knowledge as we could never expect to find combined in a single person. Such a system may, however, be produced by the labor of many, working even quite independently. It

is therefore greatly desired that the efforts of many comrades be brought to bear in this direction.

It is not only necessary in life that we should choose to do what is right, but that we should go to work in a practical manner and do it.

The matter in point, when answering the second question, is, How shall troop-leading be taught? What method should serve as our basis?

Here, above all, we must remember that, as in every art, a knowledge of war is not acquired in a rationalistic, but in an empirical manner. To accomplish something creditable in this field, routine is necessary above all else. But how shall this routine be acquired? What should be its special aim?

In view of the nature of war as we have described it, the following characteristics must be developed in a commander of troops:

To quickly form definite and intelligent decisions;

To clearly and intelligently communicate these decisions to others;

To lead troops so they will accomplish ends sought;

To quickly determine upon bold enterprises and promptly execute them.

Although the *formation of character* must be left to the conditions of practical and personal life, the *development of the military judgment* may be promoted in a theoretical manner. Different roads lead in this direction; but after some experience has been gained by the student, the following method, in my judgment, is the best: *Illustrating the diversity of situations by continual practice on concrete cases and teaching the nature of war through these illustrations, thereby developing the faculties above mentioned by causing the student to form a multitude of decisions and make his dispositions accordingly.*

This end can best be achieved by the so-called *applicatory method*, which indeed for some time past has been in use in our military schools. It is true this method cannot be equally applicable to all branches of learning, nor can be employed in

every part of an institution, for the reason that, making the greatest demands on independent study, it takes up too much time. It nevertheless appears to be the most advantageous method for the study of tactics and military history, promising withal the quickest returns.

This method is eminently applicable to independent study. We either create a situation, or take one already given; we practice the framing of orders and instructions; we elaborate the special dispositions for the march, [the length of the column, and time required for deployment; we next suppose the receipt of reports or orders and the appearance of hostile bodies; and we then sketch out a plan of action; and finally such measures may lead us into an engagement and force us to consider dispositions for its conduct or what we may have to do upon its close. Such exercises are particularly instructive in connection with military history. *They can never be brought to an end, for they are practice work;* we continually create new situations, which, though apparently always similar, are never completely alike. The task which a commander sets himself or has assigned him cannot be confined to a fixed form. The means at his disposal, according to strength, composition, and quality of troops; the intentions of the enemy; the terrain in all its variations; and many other elements are a marvelous kaleidoscope in which accident may construct the oddest situations.

The studies now before us are offered as a contribution to the theory of troop-leading herein advocated and as an explication of the method suggested. They are studies for him who writes them; for younger comrades they may serve as text-books.

The conditions shown are based on actual occurrences, but their elaboration is the product of fancy. This course has been pursued because it appeared the best in a text-book, for thus the critique which is contained in the reflections that follow can move along with perfect freedom, unhampered by considerations that would bind it as soon as the actions in late wars were the real subjects of contemplation. Furthermore, an imagined situation has the advantage of bringing out all we intend to teach, by permitting events to take a certain

course. This is not practicable in describing a real action, as it fails to present the variety of situations demanded.

Once more let me emphasize the fact that these studies simply form a *text-book*. The diligent student who by practice and theoretical studies has first acquired a sufficient understanding of war and its demands is referred to the *independent study of military history*. The whole end of our effort should culminate in this, that each should be finally competent to form his own opinions, and for this military history is our best guide. All that is therefore necessary at present is to point out to the beginner the direction in which he may pursue his studies to the best advantage.

It is also intended in this work to direct attention especially to the *training for troop-leading under the conditions of grand tactics*. Our entire peace training, inclusive of autumn maneuvers, consists principally of detachment exercises; a few hours only are devoted to combat movements of the real battle unit, the division. Even our largest exercises, the maneuvers of one corps against another, still pertain in a certain degree to detachment war, as they are necessarily constructed on a general situation covering several days, and these corps we can imagine only loosely connected with an army. *In grand tactics such a performance is rarely the work of an army corps*; the leading of a corps and its subdivisions is regulated differently, if it is isolated during several days, than if the movements of another corps of the same army must also be taken into consideration.

Each question influences the conduct of an independent leader in quite a different manner than if his command is directly dependent upon another command. The officer who suddenly encounters the enemy when patrolling with his platoon must conduct his actions from a different point of view than if he commanded his platoon deployed as skirmishers in advance of his company. A division in an army corps will generally be so situated that it must carry out an action even though it be completely annihilated in doing so, and then it would still be promoting the general purpose; on the other hand, a division widely separated from an army would, as a rule, utterly fail to accomplish its mission if it allowed itself to be annihilated. At Königgrätz, Fransecky's division could

render the army no greater service than to draw upon itself as much of the hostile force as possible, unconcerned whether it might thereby be wiped out. While a division under the conditions that led to the detachment of the forces of Generals Stolberg and Von Knobelsdorf for the protection of Upper Silesia, would never have been justified in accepting and carrying on an action such as Lieutenant-General von Fransecky ventured for the good of the whole.

In this way material differences manifest themselves between the actions of completely independent bodies and bodies in larger commands. While our peace exercises continually furnish instruction in the first direction, they cannot do so in the latter. Therefore a theoretical education which goes beyond the elementary conditions should be concerned principally with grand tactics and the dependent conditions that exist in them.

The following studies in troop-leading deal especially with situations in grand tactics, and in order to draw more advantage from this it covers not only the sphere of action of the division commander, but also the actions of commanders under him, in so far as conditions before the enemy are involved. Such a dilatation will indeed become superfluous whenever a perfect theory of troop-leading shall be available; but for the present it seems to be quite necessary.

It is evident that in this form the work can be of some benefit to the independent student. Where dispositions and reflections are elaborated in the text, the student should nevertheless not shirk the labor of working them out anew for himself. How to do this will be shown in detail in the Appendix to Part I.¹ Let the student also remember that these studies are not merely reading-matter, but that they must be worked over with dividers, paper, and pencil.

The dispositions described on the following pages as having been made on various occasions lay no claim to perfection; in such a difficult field as troop-leading we can hardly expect that a theory be perfect throughout, when so much is yet open for discussion. But even so it can be useful if the

¹The student is advised to read the first pages of the Appendix before proceeding with the problems.

reader himself forms an independent opinion on every situation. This will give him an opportunity for comparison with possibly divergent opinions in the text, and for testing his own judgment. In this connection we must not lose sight of the fact that judgment is primarily determined by one's own individuality, and that we may attain success in a variety of ways.

As regards the general situation on which these studies are based, the work is connected with the familiar conditions that existed in 1866, but as changes are made at the outset (in number of troops, dispositions, and reports of what actually took place), the development naturally had to take a different course; facts as they are given are therefore largely the product of the imagination.¹ Hence nothing herein can properly be said to be a critique of actual events in the campaign of 1866.

VON VERDY.

Berlin, June, 1870.

With the author's approval, the studies have been revised, giving due consideration to Firing, Drill, and Field Service Regulations. It is therefore here assumed that formations, regulations, and armament were the same in 1866 as they are in 1898.

VON GOSSLER,

Colonel, Commanding 4th Infantry, Guards Corps.
Berlin, August, 1898.

¹For example, only the general situation in this work is based on real conditions, and from the moment the commander of the Second infantry division initiates his own dispositions, these, their execution, and the incoming reports are inventions.



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Studies in the Leading of Troops.

VOLUME I.

The Infantry Division as a Part of an Army Corps.

PART I.

GENERAL SITUATION.

About the middle of June, 1866, the Second Prussian Army, composed of the Guard corps and the First, Fifth, and Sixth army corps, together with a cavalry division, were assembled on the Neisse. On the 20th, the First corps was thence put in march in the direction of the Bohemian frontier; corps headquarters, the First infantry division, and corps artillery arrived at Liebau June 25. On the same day the Second infantry division and the First cavalry brigade arrived at Schömberg.

War had already been declared.

The country was familiar to the troops of the First corps, who had been stationed there early in June, before hostilities commenced. At that time the frontier on the enemy's side was being watched by the Windischgrätz dragoons, whose headquarters were at Trautenau. No other hostile troops are supposed to have been in the country between the frontier and the Elbe, and, according to statements of inhabitants, no changes had since then been made in the occupation of the frontier.

SPECIAL SITUATION OF THE SECOND INFANTRY DIVISION. (Map I.)

As long as the corps should remain divided, the First cavalry brigade was to be under the orders of the commander of the Second infantry division, Lieutenant-General A———. ¹

The strength of the Second infantry division was as follows: ²

- 12 battalions of infantry;
- 4 squadrons;
- 36 guns;
- 1 company of engineers, with division bridge train;
- 1 signal corps detachment;
- 1 ambulance company.

The First cavalry brigade consisted of 8 squadrons and 6 guns.

A field hospital was attached to the division.

(The organization of these troops is given in Plan I.)

¹In the German Army a brigade is commanded by a major-general and a division by a lieutenant-general; there is no title "brigadier-general."—*Translator*.

²The formation and war strength of various units in the German Army is as follows:

Infantry.—Regiment is divided into 3 battalions; battalion into 4 companies; company into 3 platoons. Company has 5 officers, 255 non-commissioned officers and men, 8 horses, and is formed up in 2 ranks.

Cavalry.—Regiment is divided into 4 squadrons; squadron into 4 troops. Squadron is tactical unit; it has 5 officers and 161 non-commissioned officers and men, and is formed up in 2 ranks.

Artillery.—Regiment is divided into 4 battalions; battalion into 3 batteries; battery into 3 platoons. Each battery has 6 guns. Generally only 2 battalions of a regiment are attached to an infantry division, a third battalion going to furnish the horse artillery for the cavalry divisions, and a fourth battalion being retained at home as reserve.

Engineer company has 5 officers, 213 non-commissioned officers and men, 19 horses. Division bridge train has 2 officers, 52 non-commissioned officers and men, 87 horses, 14 vehicles.

Signal corps detachment (in this instance a telegraph section) 2 non-commissioned officers and 10 men.

Ambulance company has 3 officers, 8 medical officers, 249 non-commissioned officers, men, and attendants, with 46 horses and 13 vehicles.—*Translator*

The division commander had been informed of the stations assigned the other parts of the corps, also that the cavalry division had gone into bivouac behind Liebau. He did not know, however, whether the other corps of the Second Army had also left the line of the Neisse, nor did he know the special task set for the First corps. The last orders received were: To go into bivouac near Schömberg, secure against Trautenau and Braunau, not to cross the frontier with larger bodies until further orders, and to make a stand near Schömberg should the enemy advance.

In pursuance of this, the various parts of the division were in bivouac or cantonment on the morning of June 26 as follows:

Advance Guard (Major-General B——) at Bertelsdorf (cantonment):

1st infantry regiment;
1st horse battery;
4th squadron, 1st hussar regiment.

Main Body, in and around Schömberg:

Quartered in the city—

Division headquarters;
Headquarters, 4th infantry brigade and 1st cavalry brigade;
1st and 2d battalions, 4th infantry regiment;
Signal corps detachment.

In bivouac—

North of Schömberg-Trautenau road:

2d infantry regiment;
1st field artillery regiment, less 1st battery;
Engineer company with division bridge train;

Ambulance company.

South of Schömberg-Trautenau road:

3d infantry regiment;
1st and 2d squadrons, 1st hussar regiment.

1 mile northeast of the city:

1st cavalry brigade.

North of Schömberg:

Field hospital.

The trains were with the respective troops.

Left Flank Detachment (Major V——) pushed forward west of and close to Merfeldsdorf:

3d battalion, 4th infantry regiment;

3 troops, 3d squadron, 1st hussar regiment.

The Fourth troop of the Third squadron was at division headquarters.

Mounted orderlies were distributed as follows: at division headquarters, 1 non-commissioned officer and 6 men; at each infantry brigade headquarters, 2 men; for each infantry regiment, 1 non-commissioned officer and 8 men. With each battalion were 4 to 6 cyclists.

Disposition of the Advance Guard.—The Third battalion, First infantry regiment, had sent out the following outposts: the Twelfth company, into the southern portion of Bertelsdorf, one platoon occupying the exits toward Albendorf; the Ninth company, to the north of the highway, bivouacked on a line with the Twelfth; the Tenth company, to the south of the highway, protected by pickets during the night; the Eleventh company, as main body of the advance guard, occupying a large farm-house in the center of the village. The commander of the Third battalion had disposed of two troops of the Fourth squadron, First hussars, in such manner that one troop, as picket, occupied the heights northwest of Albendorf; the other troop bivouacked near the main body. Two mounted men were with each outpost company. At nightfall the pickets would be drawn in, and in their stead continuous mounted patrols would be instituted on the road beyond Petersdorf. During the day the cavalry picket had set out one non-commissioned officers' post on the Albendorf-Bernsdorf road, and another on the Albendorf-Qualisch road. Patrols would be substituted for these during the night, going beyond Golden-Oels. The First and Second battalions of the regiment, the remainder of the Fourth squadron, and the battery were in village bivouacs around the farm-houses in the direction of Schömburg. In case of attack, the advance guard commander had ordered the holding of the line occupied by the foremost companies.

Upon issuing from the mountain defile, the officers' patrols previously sent out toward Trautenau on June 25 had encountered hostile dragoons northeast of Parschnitz.

The left flanking detachment of the division had moved the Twelfth company toward Merkelsdorf, and sent the Ninth company to the heights in the direction of Adersbach. Pickets of these outpost companies closely watched the communications near them. A non-commissioned officer and 6 hussars had been assigned to the Ninth company for patrol duty, and a non-commissioned officer and 10 hussars to the Twelfth. The latter first established a cavalry non-commissioned officer's post on the height northwest of Merkelsdorf, opposite Friedland, and sent the remainder of the troopers to patrol through Merkelsdorf. The balance of the detachment, as main body of the outposts, bivouacked on the Schömberg-Merkelsdorf road, about $1\frac{1}{4}$ miles from the latter village. The hussar patrols sent forward 6 miles from the outpost of the main body had learned nothing of the enemy.

By direction of the division commander, defensive positions had been reconnoitered, in which he intended to deploy the division in case considerable hostile forces should advance to attack from Trautenau or the south.

Early on the morning of June 26 the division was in receipt of the following message from corps headquarters:

2d Army,
1st Army Corps.
Headquarters.
Page No. ———.

Headquarters at Liebau,
25 June, 11:45 p. m.

The Guard corps will cross the frontier to-morrow, June 26, east of Braunau.

The division will reconnoiter the roads to Braunau via Weckelsdorf and Friedland, and will immediately advance to the assistance of the Guard should the latter become engaged. In such case, however, the advance guard of the division will remain in its position toward Trautenau.

The Commanding General: N———.

To the
2d Infantry Division,
Schömberg.

In pursuance of this, the following message was immediately dispatched to the left flanking detachment:

2d Infantry Division. Headquarters at Schömburg,
26 June, 1:10 a. m.

The Guard corps will cross the frontier early to-day near Braunau. If it should thereby become involved in an engagement, the division is directed to assist it. It is therefore necessary to obtain early information relative to conditions near Braunau. You will reconnoiter the country to Braunau by the cavalry assigned to you, and establish communication with the Guard.

Prompt report of the results of the reconnaissance is expected.

To Major V——, A——,
Lieutenant-General.
 Commanding 3d En., 4th Regt.,
 In bivouac before Merkelsdorf.

The general staff officer personally instructed the cyclist entrusted with the transmission of this order about the route to be taken, especially the street leading out of Schömberg, and particularly enjoined him to bring back receipt showing delivery of the order. He left the city at 1:30 a. m. Fifteen minutes later Major V——— had been found, and the order delivered to him. To insure delivery, the general staff officer had also despatched a copy of the order by a mounted messenger, who, having first to saddle, arrived at his destination 10 minutes after the cyclist. Having read the order, Major V——— handed the cyclist the following written report to division headquarters:

Left Flank Detachment. Bivouac west of Merckelsdorf,
26 June, 2 a. m.

Order of this day received. Two troops of hussars will go forward toward Braunau on roads via Friedland and Weckelsdorf. To support them I will hold the exits of Merckelsdorf.

To the
2d Infantry Division,
Schömberg.

V—, Major.

Major V—— made his dispositions accordingly, and at 2:30 2 troops of the Third squadron started out in the direction of Braunau.

At 4:30 a. m. the division commander issued the following order to the commanders of the various bivouacs:

1st Army Corps,
2d Infantry Division.

Headquarters at Schömberg,

Page No. ———.

26, 6, '66, 4:30 a. m.

Troops must hasten preparation of breakfast and then hold themselves in readiness to march.

A———,

Lieutenant-General, Commanding.

Reports received during the day from the hussar patrols showed that upon the advance of the Guard only minor engagements with hostile cavalry patrols had occurred, and that one of its divisions had gone into bivouac near Braunau, the other having advanced to Weckelsdorf and Merckelsdorf. In consequence of this the division commander brought the left flank detachment to Schömberg during the afternoon of June 26. The Third battalion moved into bivouac beside the Third regiment, and the 3 troops of hussars rejoined their regiment. The cavalry patrols sent out by the advance guard had again during the day encountered a hostile dragoon patrol west of Petersdorf, in support of which a considerable body of cavalry, probably a squadron, was seen.

Shortly after 5 p. m. the corps order for the next day was received at Schömberg:

"To-morrow, June 27, at 4 a. m. the First infantry division and the corps artillery will march from Liebau, the main body via Golden-Oels, and a flank detachment via Schatzlar, and the Second infantry division with the cavalry brigade from Schömberg, upon Parschnitz. There the corps will unite and halt two hours, except that the First infantry brigade (First infantry division), designated as advance guard, will continue the advance on Trautenau and occupy the city. The march will be resumed in one column in the direction of Arnau; the Second infantry division with the Second infantry brigade and the corps artillery will constitute the main body of the corps."

The order closed as follows:

"It is of paramount importance that the corps be concentrated at the earliest possible moment in a position on the left

bank of the Aupa near Trautenau, both flanks protected against the sudden approach of hostile forces.

"The commanding general will be found with the First infantry division."

At 6 p. m. the order of march of the division for the next day was given out to the advance guard, Second infantry regiment, Fourth infantry brigade, hussar regiment, First field artillery regiment, engineer company, signal corps detachment, ambulance company, First cavalry brigade, and the field hospital:

1st Army Corps,
2d Infantry Division.
Page No.——.

Headquarters at Schömberg,
26, 6, '66, 6 p. m.

*Distribution of Troops
for June 27.*

DIVISION ORDER FOR JUNE 27.

Advance Guard:

(Major-General B——.)

1st Infantry Regiment.

Hussar Rgt. (less 1 tr'p).

1st Bn. 1st F. A.

Engineer Company.

1 Amb. Co. Section.

1. Hostile cavalry is watching the frontier northeast of Trautenau.

2. The army corps will cross the frontier to-morrow, June 27, and unite at Parschnitz; the Guard corps is near Braunau and Weckelsdorf.

The First infantry division will advance at 4 a. m. from Liebau via Golden-Oels.

Main Body:

(In order of march.)

2d Infantry Regiment.

Staff and 2d Bn. 1st F. A.

4th Infantry Brigade.

1 Amb. Co. Section.

Signal Corps Detachm't.

Division Bridge Train.

2d Field Hospital.

1st Cavalry Brigade.

3. The Second infantry division will send its advance guard forward at 4 a. m. on the road to Trautenau, keeping up communication with the First division and attacking the enemy wherever he is seen.

4. The main body will follow at 4:15 a. m., and the cavalry brigade at 5:30 a. m.

5. The heavy baggage of the main body will be parked after 7 a. m. north of Schömberg, and that of the advance guard north of Ber-

telsdorf in charge of Lieutenant X——, First hussar regiment, who will also command the troop of hussars on duty at division headquarters.

6. I will be with the advance guard.

A——,

Lieut.-General, Commanding.

COMMENTS.

Distribution of First Army Corps.

It may seem strange, at first thought, that the corps was not united at one point, but divided into halves about $3\frac{1}{2}$ miles apart and occupying bivouacs near Liebau and Schömburg. Such a distribution should, however, be made wherever conditions will permit. The larger the space over which troops are spread out the easier their shelter and subsistence; furthermore, the number of available roads is increased, and large masses can be moved more comfortably and rapidly. The art of directing armies is principally founded on distributing the masses over large spaces, so they may live and march while retaining the ability to assemble their full force in time for decisive action.

On August 26, 1870, during their advance on Paris, the Second and the Maas Armies occupied a front of about 41 miles; at noon of September 2 the masses of both armies, with the exception of the Sixth corps and the detached cavalry about Sedan, occupied a space a little more than $4\frac{1}{2}$ by $2\frac{1}{4}$ miles.

Such separation, however, must never go so far that the several bodies cannot mutually support each other. In the case in hand this could certainly be accomplished, for the distance between the two divisions was only about 4 miles, and in the mountain defiles the advance of the enemy upon either one of them could be considerably delayed by its advance guard. Then also, in the case before us, the eventual advance of the corps would be materially facilitated by the separation of the two divisions, as a great highway was at the disposal

of each for crossing the mountains. Through this the egress into the valley of Parschnitz, which under certain circumstances might be quite dangerous, could be made in half the time required if the corps were confined to a single road.

As the cavalry division of the Second Army was in bivouac not far from Liebau, it was expedient to order the First cavalry brigade to Schömberg. A large accumulation of cavalry, especially in mountainous country, materially increases the difficulty of sheltering and subsisting.

It was an especially wise measure to place the First cavalry brigade under the orders of the commander of the Second division. On the battle-field unity of command is a matter of course. If the fighting bodies belong to different organizations, and common supervision has not been previously provided, the commander highest in rank on the spot assumes authority. In marches and bivouacs also it is best to place the various bodies alongside the same road under a common commander, whenever trouble is likely to arise in movements or in the use of villages for shelter, etc. If this is not done, it may become necessary for superior authority to issue complicated orders (in this case corps headquarters), which, no matter how carefully worded, are not always adequate to prevent inconvenience and friction.

Information in the Possession of the Division Commander.

The division commander's first information of the Guard corps having left the line of the Neisse and approached the left wing of the Second infantry division was contained in the order from headquarters of the First army corps at Schömberg that reached Liebau early on June 26. Furthermore, up to this time he had no knowledge whatever of the general intentions of army headquarters or of the special task set for the First corps.

It may seem strange that an officer of such high rank as a division commander should be so poorly informed of the general situation; in some cases it is certainly true that not enough is done in this direction. We must always adhere to the principle that every independent commander ought to be sufficiently oriented to be able to make proper dispositions in unforeseen contingencies fully in accord with the general war situation, and on his own initiative. A commander may doubt-

less be greatly interested in what may lie beyond such information, but nevertheless we should under no circumstances communicate to any one more than is necessary for his guidance in forming his own decisions in cases of emergency. *The secret of what is being done or is intended cannot be too closely guarded.*

What is especially necessary for every commander to know is the movements of columns in his vicinity. Subdivisions of his command must also be informed of this, else the sudden appearance of marching columns may cause unnecessary delays. It is therefore quite essential that bodies of troops located beside or behind each other, even though they may not be parts of the same organization, should keep up communication regarding all matters of importance.

But in this case the instructions given to Lieutenant-General A—— were sufficient for all purposes. With his attention drawn to the direction from which the enemy could appear, he would know what to do if the latter attacked. That he himself must not assume the offensive until further orders is easily deduced from the injunction not to cross the frontier with larger bodies, a precaution based on a desire not prematurely to draw the attention of the enemy to the plan to take the offensive in that direction with all forces. But no time was lost in communicating this purpose when the Guard corps had approached the sphere of the Second infantry division.

Bivouac of the Division.

Troops should have the benefit of roof shelter wherever possible. Even when near the enemy this is practicable for some of the troops, although for the most advanced forces we must resort to village bivouacs and alarm quarters. During the struggles of the detached army of the Grand Duke of Mecklenburg around Beaugency, where the nights offered the only pauses in an otherwise uninterrupted series of engagements, the contest for farm-houses as night shelter was often continued to a late hour.

In this case the limited number of villages did not allow the shelter for a large number of men. Besides Schömberg and Bertelsdorf, Merckelsdorf might have been so used. The

objection that this village was too far distant from Schömberg to enable the main body to give timely support to a side detachment is not tenable whenever an extended service of patrols is established, which would insure the timely discovery of the enemy's approach. Furthermore, the rocky character of the country around Adersbach would greatly increase the resisting power of the single battalion.

Strength of the Advance Guard and the Left Flank Detachment.

The Schömberg-Trautenau road forms the main line of communication in the network of roads as far as need be considered here. Furthermore, it was known that there were hostile forces on this road. For the present the road via Merfeldsdorf requires less consideration; the patrols found no enemy in that direction, and the above-mentioned rocky ground makes the movement of large masses improbable. Consequently the division could secure itself in that direction by a small force, and only one battalion was detached toward Merfeldsdorf, while the Trautenau road was covered by three battalions. If both were of equal importance, however, both with reference to terrain and position of opponent, it would have been necessary for the division to send out two equally strong advance guards.

Moreover, the advance needed only to have been formed of two battalions of the First infantry regiment, the third battalion being sent in the direction of Merfeldsdorf. The cut in the road near Bertelsdorf and the character of the mountainous ground surrounding would presumably have enabled these smaller forces to offer effective resistance in case of attack until help could reach them from the nearest point. The important principle of breaking up tactical units as little as possible may well be disregarded in this instance; in the partition here illustrated a detachment had been made from the Fourth instead of the First regiment, although it will be found that under subsequent circumstances this would not be justifiable. In favor of the partition made the following can be said: If the advance was to be made in one of the two directions and it was desired to start out at once with the foremost troops, the third battalion of the First regiment, if

detached toward Merkelsdorf, might easily be permanently separated from the regiment. If, on the contrary, a battalion of the Fourth regiment formed the left flank detachment, in case of an advance on Trautenau it could rejoin its regiment in time; in case of an advance via Merkelsdorf, communication with the other battalions could be re-established by placing them at the head of the column starting from Schömburg.

As for the cavalry, the Fourth squadron was attached to the advance guard, and the Third squadron, less 1 troop, to the left flank detachment. Considering the fact that the forces were in a mountainous country where there were only a few practicable roads for cavalry, a single squadron would have been amply sufficient for both parties, the more so as quarters should have been provided in Bertelsdorf for that portion of the outpost cavalry not employed during the night. We must never forget that the troops nearest the enemy enjoy the least rest. We will not often be able to relieve the cavalry regiment of a division; so there is all the more reason that we should lose no opportunity to do so.

As for the battery, although the valley would allow the use of more than two guns in only a few places, we can generally find good positions for a battery in bends of a road upon projecting ridges, from which it can sweep the road and adjoining territory. For this reason six guns were sent with the advance guard. When it is intended to hold a section of country, it becomes necessary to attach as much artillery as possible. A limitation is naturally indicated when the ground prevents the employment of this arm to any great extent, as in the case before us.

Another question is, Should the left flank detachment be provided with artillery? In favor of an artillery support is the fact that the position there would gain in power of resistance; in opposition, the fact that the division should keep its batteries together, and that generally only so much artillery should be detached as is urgently needed. Such a necessity is not, however, apparent in this case, as an attack near Merkelsdorf was not expected, at least for the time being. The post there has really only the character of an observation post, for the purpose of which only a battalion was sent out, because the very broken terrain demanded extensive measures of se-

curity to prevent the stealthy approach of small hostile parties. A consequence of greater dispersion is always the necessity of posting correspondingly strong supports for the most advanced troops. On the whole, we should warn against attempting to send a few guns with every detached battalion, as was frequently done while the cordon system was still in full favor. Small bodies acting independently are often forced to extend too far, and then there is little left for the support or protection of the artillery. The dispersion of artillery should be discouraged all the more by reason of the fact that the 36 guns of a division are barely sufficient to furnish the necessary artillery support.

It would seem to be a mistake that engineers had not been attached to the advance guard. In mountainous country opportunity will always be found for their profitable employment with the foremost troops.

Positions of the Advance Guard and the Left Flank Detachment.

As a rule, advance guards on the march take up their positions during the afternoon, often not until evening. Examination of the ground, measures of security, etc., in this case should be carried out by the simplest means. We must remember that the near approach of night leaves our opponent no time to inform himself concerning measures taken by us, sufficiently to permit his initiation of any night enterprises, which are difficult under all circumstances. We should also remember that in day-time the discovery of movements of larger hostile parties, which are the only things that can cause us serious trouble, is the duty of the reconnoitering cavalry; *so on that account it is not necessary to cover the entire territory with a chain of double posts and corresponding pickets and outpost companies.* Small patrols will think twice before riding into the center of a hostile position out of which they could hardly escape if discovered. Consequently, in modern tactics, *the measures of security taken for the protection of halting forces will be confined chiefly to watching roads.*

But in this, too, there are many exceptions, among which may be classed the situation of the advance guard and left flank detachment as given in the study before us. In the nar-

row valley in front of the advance guard was the almost unbroken line of the farm-houses and gardens of Bertelsdorf, Albendorf, and Petersdorf, over 4 miles in length. These almost totally obstructed the view to the front. Nevertheless the advance guard could not be pushed forward to the exit of the defile, which would be most expedient under other circumstances. That point is 8 miles from Schömberg, and to occupy a position there would be a violation of the injunction not to cross the frontier with larger bodies. The sides of the valley being so near the road give it the character of a defile; to the west of Bertelsdorf it widens somewhat into a larger kettle-shaped space. Besides the line of communication existing between Qualisch and Golden-Oels, there are only the country wagon-roads between Albendorf and Bernsdorf and two other roads leading north from Bertelsdorf. *Merely to watch these roads was not sufficient.* The roads leading over the mountains must be occupied at the summit by a force strong enough to maintain its ground against hostile attack until reinforcements could reach it. In territory so difficult to observe, the approach of hostile parties is likely to be discovered too late, all the more so because every foot-path, often invisible from a distance, would be known to the enemy, who has been in the country for some time. The sudden dislodgment of one of the division's posts on the summit might put the troops bivouacked below in a most precarious situation. It was therefore essential to hold the high ground from the outset, by separate companies especially advanced for the purpose.

In this case the line of the foremost companies formed the line of resistance, although ordinarily the attack of the enemy should not be met on the line of the supporting outpost companies, but near the outpost reserve. Outpost companies should resist only long enough to give the resting troops time to get ready for action; they are not required to maintain the position assigned them, but to resist the enemy only for a limited time. Although the country around Bertelsdorf was not favorable for the employment of cavalry, it was nevertheless advisable to gain additional security by pushing cavalry beyond the outpost companies. It could then discover an advance of the enemy in time. During the night the at-

tention of the cavalry should be directed toward the roads, on which it should patrol beyond either the reserve or supports of the outposts. Taking into account the character of the terrain, the sending of the foremost parties to the frontier line, so that the cut in the wagon-road leading from Qualsich to the Trautenau highway and the ravine from Albendorf to Bernsdorf would be immediately in their front, appears more judicious than taking up the positions that were actually occupied. In this case the main body of the advance guard should then be stationed in the kettle-like space west of Bertelsdorf.

We should add that the longer we remain opposite the enemy, the more care must be devoted to security, which frequently leads to the establishment of a connected outpost line--as, for example, in the blockade of a fortress. It must be acknowledged that in time both sides obtain a better knowledge of the dispositions of their opponents, and are thereby offered better opportunities to take advantage of carelessness or errors of the opposing side. Even in the case before us it would be judicious, if the division remained some days longer at Schömburg, to extend the sphere of security of the advance guard and to establish connection with outposts of the left flanking detachment and the First infantry division.

It was the duty of the left flanking detachment to watch the road from Friedland, as well as the rocky region around Adersbach, and at the same time to occupy the road from Merckelsdorf. If it attempted to establish a connected line of outposts there, its forces would be quite insufficient, as the distance was nearly $2\frac{1}{4}$ miles. It must therefore be satisfied with closing the main road and covering the country in both directions by detached bodies, who must institute independent measures for their individual security. The strength of these detached parties depended on the proximity of the enemy and the formation of the terrain. Contrary to the tactics of the outposts of the advance guard, both outpost companies (Ninth and Twelfth) put out pickets in day-time. Before the front, outpost cavalry could not be employed in the rocky country around Adersbach and Merckelsdorf. The infantry also had to provide for its own security. Meanwhile a correct assignment of hussars to the different companies enabled

them to send out cavalry patrols and establish a cavalry non-commissioned officer's post on the left wing.

Scouting Instituted by the Outposts.

The duty to scout at long range falls upon the cavalry. Even in territory which admits of the exhibition of the fighting power of this arm only in a limited degree, it should preferably be used, unless our own outposts are advanced close upon the enemy. As in this instance the cavalry patrols which had gone ahead upon the arrival of the advance guard soon encountered hostile cavalry outposts behind Petersdorf, the cavalry scouting zone was rather limited. It was expedient in the mountainous terrane to send forward cavalry non-commissioned officers' posts to points from which they could continuously observe the enemy's outposts. Under these circumstances the hussar picket northwest of Albendorf should be ready at any moment to follow the enemy with patrols and ascertain his location as soon as his withdrawal was observed.

The left flanking detachment had sent out hussars on different roads from the main outpost body to a distance of 6 miles. These had consequently ranged to Petersdorf, and also, via Friedland and Weckelsdorf, as far as Dittersbach. Explicit instructions how far such patrols should reach out, when the enemy is not in the near vicinity, can never be formulated. Ordinarily large masses of cavalry will go in advance of a marching army corps. In the exceptional case before us this was omitted, for it was desired to conceal the direction of the intended march into the enemy's territory as long as possible. Under different conditions the cavalry brigade of the First army corps, or the Second cavalry division, should have driven away the hostile dragoons along the frontier and reached Trautenau long before the army corps arrived near Schömberg or Liebau. After this its next task would be to scout the entire region up to the Elbe.

But when larger bodies of cavalry are not in front, the outpost cavalry must undertake the scouting. It is also the business of superior commanders to send out special officers' patrols, as their judgment dictates. The outpost cavalry, under the direction of its leader, should keep in touch with the enemy. The outpost commander could also send out patrols

from the main body. In this case the division had just arrived and was not yet at all oriented regarding the appearance of the enemy in the country around Braunau. It would not be wise to permit the cavalry patrols to range over this territory. The civil authorities of the enemy still exercised their functions; the telegraph carried information to the hostile commanders from every direction; the patrols, who could only notice what transpired in their sphere of vision, would invariably be watched at every step; if they branched out too far, they could not be efficiently supported, and hostile patrols could easily have struck them a hard blow. Only the best officers, with a few selected men and horses, should be sent for long distances. As soon as the enemy's position is ascertained, it is recommended to send forward entire squadrons to scout or assure security, if troops are on hand. These are not bound to any specific position, and can hang on to and follow the movements of the enemy. The sphere of scouting naturally grows larger with the increase in number of troops available, but the single cavalry regiment of a division represents only a limited force. In the case in hand officers' patrols went beyond Dittersbach. Whenever conditions at all permit, we should observe the rule to examine the country ahead of a division to a distance equal to a day's march. If the division remains for any length of time in the same position, and the region in its immediate vicinity is under its control, then a further extension of the cavalry patrolling zone may follow. In their own country patrols may undertake long rides at any time; but in such cases they must nevertheless act cautiously.

At the same time, it is generally considered that an officer with a few selected horses may be employed to more advantage in gathering information than a whole regiment of cavalry. Yet we must not overlook the fact that this proposition applies only in a limited degree. The officer can certainly move with more secrecy and rapidity, and he can take a roundabout road, without serious detriment. But such an employment presupposes that the enemy's cavalry is not in its proper place. Our experiences in the last war are of a decidedly one-sided nature, for the French cavalry was either not thus employed, or else only in a very injudicious manner. If

hereafter we meet an enemy who during operations uses his cavalry as we did, then we must familiarize ourselves with the maxim that to see at all we must first be able to fight. The training of large cavalry masses must therefore be carried on in the most thorough manner.

As the example we are now considering involved the sending of hussars to a comparatively great distance in order to learn the condition of affairs at Braunau, the commander of the left flank detachment did not fail to dispatch infantry for their support. Such a measure always appears wise, but is especially necessary if the cavalry finds itself opposed by a superior mounted force. It may then take greater risks, assured that even if it should be unfortunate in an engagement, the pursuit would come to a halt in the vicinity of the infantry, which would give it an opportunity to reassemble.

Patrols were certainly sufficient to positively determine whether there would be an engagement at Braunau. If there should be, and the division were consequently obliged to start out, it could hardly be advised too soon, in the most exhaustive manner, regarding the state of affairs there. It would be a question, however, if this could be accomplished by patrols when once the enemy had instituted proper measures of security in the direction of the approach of the troops. It would then become important to force back the cavalry covering the enemy at that point, so a better view of his lines could be obtained. In this connection it would have been quite right to make use of the First and Second squadrons from Schömberg in the reconnaissance in question, the more so as the First cavalry brigade was available to replace them.

Selection of Defensive Positions for the Troops of the Second Division in Bivouac.

The division was positively instructed to maintain itself near Schömberg in case of a hostile attack; it is therefore self-evident that Lieutenant-General A—— would at once begin to plan for posting his troops. It would have been in no wise superfluous if he had also made arrangements for the artificial strength of the selected positions, particularly by throwing up of emplacements for guns, the construction of rifle-pits, preparation for defense of farm-houses, etc. The

engineer company offered material assistance for these purposes. Even the possibility of the enemy's approach from two different directions should not have prevented the execution of as much work as time and means permitted, without successive demands on the strength of the troops. We can still learn much in this direction from the methods of the French Army. As a rule, we console ourselves with the thought that we will probably not remain long in one position, and the consequence is, that in many instances we do too little, frequently nothing at all.

Even if the division should not remain long at that point, it would be the duty of the commander, on account of the proximity of the enemy and his unfamiliarity with conditions prevailing on the hostile side, to prepare for defense in case he should be attacked; the preparation of field fortifications could in no wise be considered superfluous.

Orders from Corps Headquarters for June 26.

The message from corps headquarters received at Schömberg on the morning of the 26th stated that the Guard corps was approaching, directed scouting towards Braunau, and contained positive instructions as to what the division should do as soon as fighting commenced near Braunau.

Even if it had not been the intention of the commanding general to support the Guard corps, the time had now arrived when the Second infantry division ought to be advised that other troops were approaching its sphere, although up to that moment it was prohibited, as already explained, in order that the secret of the operations would be guarded; no necessity existed for the Second division's learning of it any earlier.

The necessity for the advance guard's remaining in position toward Trautenau lay in the fact that the road thither could not be left uncovered in face of the enemy's position, especially if the First division should also have marched in the direction of Braunau, in which case its flanks must be protected. The absence of advice in the order from corps headquarters, as to whether, in case the Second division did march to the left, the part of the corps situated near Liebau should follow it, might be a subject for comment. This information, however, could not have been given, for at that time the com-

manding general himself did not know. There was always a possibility that the positions of the First corps might be attacked on June 26 while the Second started to the support of the Guard. The commanding general would then have the advance guard of the Second division at his disposal, as well as the entire First division (16 battalions), with which to hold the mountain roads to Liebau and Schömberg, and a departure of the main body of the First division could not take place. On the other hand, in compliance with orders, the main body of the Second division must advance to an engagement of the Guard, under any circumstances, even should the advance guard of the division meanwhile be attacked. In any case, it had been specifically ordered that the advance guard remain in position.

Disposition of the Second Infantry Division June 26.

The Second division went into minute detail in its orders to the left flank detachment. In addition, it emphasized important points. Such a procedure is recommendable. Subordinate headquarters have no insight in the more general features; what superior headquarters expect to accomplish through orders given must always be precisely stipulated.

The preparation of a special order of march to cover a possible advance toward Braunau did not seem necessary. The troops which would be affected in such a case were either in bivouac or village shelter within a narrow space. It was only necessary to alarm them and order them on the spot to form in such a manner that they could successively take their place in the column of march as intended, except it must not be overlooked to furnish the advance guard on the Trautenau road, as well as the one newly formed, with the necessary explanations.

It was a question whether cooking at an early hour should not be enjoined, for, if an engagement should be brought on in the vicinity of Braunau, it could not be foreseen, on account of the great distance, whether troops would have a chance to cook later in the day. The theory of early cooking is much abused. Not every stomach cares to take a full meal in the early morning. It requires time to cook, and had early reports of fighting near Braunau come in from the hussar patrols sent

in advance, the cooking would have to be interrupted. It is advisable to order early cooking only when certain of not being interrupted and when intense labor is likely to be demanded.

The bringing of the left flank detachment to Schömberg seems quite proper, as the presence of the Guard near Merksdorf afforded the necessary security on the left. As a rule, it is not advisable to take a body of troops out of bivouac when once established there. In this case, however, it was not known what hardships the next day might bring, and the distance a battalion will have to march during a day is not a matter that should be treated inconsiderately, whether great or small.

DIVISION ORDER FOR JUNE 27.

*Distribution of Troops.*¹

It is evident that when advancing against an enemy the various parts cannot move forward in immediate succession, one closely behind another, as an accident befalling the head would throw the whole into disorder. In case of larger bodies this compels us to segregate an advance guard composed of different arms and of sufficient stability and independence to insure, by deploying when the enemy is encountered, ample time for the remainder of the column to assume a battle formation.

In order to avoid a deployment of the whole column immediately upon the appearance of every minor party of the enemy, and to facilitate such deployment when really neces-

¹In this connection let us note that we have gone too far in our methodical limitation of such technical knowledge as is necessary for a leader of troops. Thus a great number of things have been handed down traditionally, such as staff duties, which are common property, rather than a specialty of the staff. The art of command does not lie alone in the leader of such bodies as are generally considered in connection with a staff—a division or army corps—but it must be exercised with skill by every leader, even by the lowest ranking. Command is in itself so difficult that too much trouble cannot be taken to acquire it and exercise it constantly when once acquired, and instruction in it must therefore begin from the moment of an officer's first education in troop-leading.

sary, an interval of a certain distance is left between the advance guard and the main body. A reserve is not needed while a body is on the march, although in an action the very nature of combat renders it impossible for a commander to dispense with a reserve up to the moment that he must employ it. As a rule, all that immediately participates in the action is only partially, most often not at all, in the hands of the highest commander. He insures a thoroughly efficient service only in so far as he retains at his disposal closed bodies of troops, or understands how to form them during the various stages of an engagement. An engagement should therefore never be initiated without a fighting reserve, but on a march a reserve is not needed. *All troops not actually engaged or assigned to a special task are reserves of the highest commander.*

In this case the advance guard included a regiment of the Third infantry brigade, the second regiment of this brigade being at the head of the main body. If the Third brigade had not thus been divided, and the advance guard had become engaged, in order to reinforce the advance guard the next undivided unit at the disposal of the division commander would have been the brigade of the main body, the Fourth infantry brigade. And as an order covering the whole can be issued only in exceptional cases (the matter in question being the immediate support of the advance guard), the division commander would either have to order forward at once the entire brigade, or parts of it—a regiment or battalion. As it was, he could reinforce the advance guard with the remainder of its own brigade; otherwise he would have to break up the Second brigade also, and on the fighting line the brigade commander in charge of the advance guard would have to assume command over troops entirely unknown to him.

The greatest error possible, however, is the praiseworthy inclination of commanders to conduct their fight independently. When this is done, the way is prepared for disorder and superior control generally becomes impossible. We must therefore strive to preserve as long as possible the original feeling of unity that grows out of the peace relation of troops—their battle formation. For these reasons the Second regi-

ment of the Third infantry brigade was placed at the head of the main body.

We must also note that in view of the great losses which occur in a short space of time in a fight of breech-loader against breech-loader, it is necessary to give a much greater value to strong reserves and depth formation. Had the Second infantry regiment been placed in rear of the main body, the division commander would have been tempted to call the Third infantry brigade into action too soon, so that a reserve of only one-fourth the strength of his command would have remained at his disposal. Besides, we are taught by experience that a reserve so formed would easily have slipped out of the hands of the division commander, and he would then have no reserve whatever at his disposal. The division commander would be with the mass of his troops, and his attention would be directed to the front (where the advance would be engaged), if he would not be there in person. The reserve regiment would be separated from him, out of his sight and the sight of the enemy, while it would be more anxious than any other body of troops to take part in the engagement, for its brigade commander and comrades would be wrestling with the enemy at the front. Only the slightest provocation would be needed, if at all justifiable, to start a runaway to the front.

Neither would it be any different with the brigade commander in charge of the advance guard, who had only one of his own regiments at his disposal. Should the engagement become hot and difficult on his side, he would want the other regiment of his brigade also. The interval between such a desire and an attempt to fulfill it is brief, and it frequently happens that, in order to satisfy the desires of both that part of the brigade fighting at the head and the other parts standing in the reserve, the separated parts become united against the will of their commander. Don't say that this could not happen, for here we have manifestations founded on human nature, and human nature is what we must reckon with. In battle, human nature on many occasions triumphs over the forms that bind individuals together for concentrated action.

Furthermore, this policy is dictated by experience. In the engagement at Gitschin, Lieutenant-General von Tüm-

pling placed the two grenadier battalions of the Twelfth regiment in the reserve of his division. The other regiment of the brigade was fighting under its commander on the wooded height of the Priwiszin. Suddenly the two battalions of the Twelfth, in reserve, were seen taking part in the near-by engagement at Klein Ginolitz. It is immaterial how this came about, but at all events it was contrary to the intentions of the division commander, and it took the whole energy of the superior leading and remarkable fire discipline of this regiment to disengage it from the fight. Exactly the same happened with Fransecky's division in the struggle for the Swiep forest near Königgrätz, the very division that had to bear the brunt of the heaviest fighting.

It is therefore not advisable to allow such an artificial separation with brigades. We can do this if we adhere to the rule that the regiment which constitutes a brigade jointly with the advance guard regiment should always be left at the head of the main body. The same rule can apply to larger or smaller bodies of troops. It has the advantage that the first support of the advance guard is furnished by that body nearest akin to it in organization, and the brigade commander leads his undivided brigade into action. Besides this, the division commander has at his disposal an equally strong reserve; and still further, if it becomes necessary to suddenly form another advance guard, in case it is necessary to rapidly move in another direction, it will not be necessary to break up the second brigade also.

Referring to the cavalry, nearly the whole hussar regiment was assigned to the advance guard, although it moved forward on a mountainous road on which the entire regiment could not be utilized. But the mountains open out near Parschnitz; the patrols of the advance guard had continuously kept the region under eye, almost up to the village; and a considerable resistance on that side of the opening was improbable. As soon as the plain of Parschnitz was reached, however, communication was to be established with the First infantry division; it must be ascertained positively whether Trautenau was occupied, the Aupa valley too must be reconnoitered in a southerly direction, and all that while confronted, in all probability, by parts of the Windischgrätz dragoons. If

the division commander would then have brought up the hussar regiment from the rear of the division, much difficulty would have been encountered, as this must be accomplished on the same road alongside the marching column, which, in any event, would have caused considerable loss of time. Even supposing that, contrary to expectations, the advance of the opponent should have brought on an engagement while still in the mountains, the one regiment could hardly have impeded the movements of the foot troops if the larger part of it had been attached to the rear of the advance guard. But had the cavalry brigade been assigned to the advance guard, it would certainly have occasioned just such a hindrance, as the length of its column would have delayed the arrival of the main body for at least half an hour. Under the circumstances the cavalry brigade was consequently relegated to the rear of the entire marching column. On a plain the division commander would have sent forward the entire cavalry brigade, with the addition of the greater part of the hussar regiment, as independent cavalry, in front of the advance guard, if a separate road had been assigned to the division for the march.

The hussar regiment was short one troop; this, according to the order, was under the command of an officer charged with maintaining order in the heavy baggage of the division. The division had no means to accomplish this, and an entire troop was ordered on this duty during this first war march, because its heavy baggage must be formed with a perfectly manageable body, and the passage of the mountain defile demanded a faultless order of march. There was no cavalry at the head of the main body. The main body did not need to worry about the security of its flanks in the mountain defile. The mounted riflemen,¹ of which 1 non-commissioned officer and 8 men were with the Second infantry regiment at the head of the main body, sufficed to keep up communication between the main body and the advance guard. Besides this,

¹Besides its regular infantry, the German Army has 19 battalions of riflemen (Jägers). Their war strength is the same as that of the infantry battalions, also their armament, but, owing to no men being taken from the ranks for the band, the number of rifles is greater. A battalion may be attached to an army corps or a number of its men attached to an infantry regiment.—*Translator*.

cyclists could have been advantageously employed on the macadamized road. As the situation was very simple, these means of communication should have been sufficient; although ordinarily it would be well to use in addition a troop of cavalry for this purpose, especially, for example, if a division was the extreme wing of an army in level country.

Detached cavalry should be relieved at stated periods, about every three days; for, being less under control on account of their duty, they may be used up too rapidly.

Of the artillery, the First battalion (three field batteries) was assigned to the advance guard, while the Second battalion followed the leading regiment of the main body. The artillery is the arm which can inflict damage on the enemy at the greatest distance; the bulk of it must therefore enter into action before the mass of the infantry. Consequently we should never venture to place artillery too far to the rear in the marching column; its place is near the front; under certain circumstances, as here, several batteries may be assigned to the advance guard. At first hardly more than six guns could have gone into action in the narrow mountain valley, and the activity of a stronger force of artillery would only be possible when the Aupa had been crossed. But for the latter purpose it must not be left too far in rear, and the three batteries of the advance guard were designated to support the infantry of the advance guard when it deployed out of the mountain pass, so that it could assure the debouching of the main body out of the mountains. The order of march allowed the entire division artillery to be brought into action as soon as six battalions of infantry should have been deployed.

Special value must be laid on keeping each battalion of artillery intact. In the situations of grand tactics single batteries cannot maneuver on their own responsibility, as we see frequently done during small detachment exercises. When 12,000 infantry are striving to reach an object, the attached artillery must not attempt to improvise scenes arbitrarily, by separate performances, but it must contribute its entire power to the attainment of the object. But this is possible only when batteries do not wander about singly, according to their own ideas, but obey a common will. In grand tactics the rule is to employ batteries in masses; the use of single batteries is

the exception; and we must cling to the rule all the more persistently by reason of the fact that the exception is often enough demanded.

It is quite superfluous to detail a party of troops especially to support artillery on the march, as artillery is then always in combination with other arms; troops march before and behind it. If a company or battalion is charged with such duty, we may be sure that these bodies will be lost to their own organizations in action, at the same time furnishing no protection for the batteries, for it will be impossible to keep up with the rapidly advancing guns. It is different, however, when more than three batteries march in close order. In such case it is recommended, especially in country where the view is obstructed, to insert bodies of infantry in the marching column of the field artillery. The caissons of the batteries follow by battalion under command of an officer; those of the First battalion at the rear of the advance guard and those of the Second behind the First battalion.

There is nothing else in regard to the distribution of troops that calls for detailed explanation. It is well understood that an engineer company must be with the advance guard, and that half of the ambulance company, which is divided into two sections, must also accompany the advance guard, the other half following the main body, and that if an engagement is expected, the field hospital may be brought up to the troops.

Substance of the Order.

The surest means of imparting orders consists of the verbal instructions given by a senior officer directly to those concerned—especially so, as it affords opportunity for explanation and prevention of misunderstandings. Verbal orders can also be transmitted by adjutants, aids, etc., but only in cases involving a brief and positive command, such as, "The brigade will break camp and march at once via X—— and Y——." If, however, other conditions are to be touched on which refer to general instructions or to other columns, etc., *written* orders are unqualifiedly preferable.

In this case the division, camped in separate detachments, had a depth from main body of the advance guard to rear

of the cavalry brigade of about $3\frac{1}{2}$ miles; written orders must therefore be employed. The division might have been advanced, the different bodies being put in motion successively, by aids. But in such an event none of the superior officers would have known at first what to prepare for, and the troops would have needlessly remained standing under arms long before the last bodies could have been put in motion. Consequently such an expedient is advisable only when unavoidable, as would have been the case if, on account of an engagement of the Guard corps at Braunau, instead of the halt that was ordered, a sudden start of the main body of the Second infantry division in that direction had been necessitated. This could have been initiated all the sooner by employing aids to carry verbal instructions, as the immediate orders concerned only the troops bivouacking around Schömburg, the guard that had been previously advanced having been required to remain in position toward Trautenau.

In a written order it is necessary to inform the subordinate officers of *everything the commander knows concerning the enemy, so far as it affects the end in view*. All channels of information unite in the hands of the division commander; every commander below him can only have a one-sided view of the general situation. With such a large body of troops, the highest commander cannot be with all his subordinates or give directions for every detail, and the latter can be placed in position to make proper dispositions only by first receiving such general information; and only then will they be able to concentrate their attention toward the direction from which the opponent is expected and make dispositions accordingly and without needlessly fatiguing their troops.

Information as to what our intentions are also belongs to the order. Yet we must not go too far in this latter direction. It is doubtless of interest to troops, to know how their better informed commander views the situation; but the commander must consider every eventuality carefully. Moreover, a detailed statement submitted to subordinates only confuses them, since they are hardly ever so placed as to recognize what has actually occurred. In addition to this, one should bear in mind the conditions under which an order usually reaches its destination. Here army headquarters had prescribed the pro-

cedure of the corps for several days, because the matter in point was the crossing of a mountain range, and, with few roads available, the army corps, separated by a day's march, must move with an extended front. It was impossible to direct the movements from day to day. Corps headquarters was therefore in the fortunate position of being able to issue orders for the next day at a very early hour. Yet such is rarely the case. Ordinarily army headquarters can give out their orders only after the reports of the several corps regarding the day's events have come in. These orders get to the corps not located in the immediate vicinity of headquarters sometimes during the night, and the last subdivisions (brigades and regiments) do not receive them through official channels until early morning. Half asleep, with a poor light to read his maps by, the commander has then to make his dispositions; at such a time every word in the order not absolutely necessary is objectionable. Instructions that are pages in length require much time to be read, and still more time to be correctly understood. The criterion of a good order will always be simplicity and clearness; if one word is stricken out of any good order, it will become unintelligible; and any word that can be stricken out and still leaves the order intelligible is superfluous and consequently harmful.

Every leader should therefore deliberate thoroughly on how much of the information given him should be transmitted to his subordinates. In the example we are here considering the division commander had to know what the commanding general purposed to do after Parschnitz had been reached. His division might arrive there before the other division and its commanding general. What should be done in such an event, if this information had not been furnished Lieutenant-General A——? If the corps was to halt there, his troops need not be tired out by hours of waiting, but could establish their bivouacs and bring up their heavy baggage. But if it had been the intention to proceed further, and if the division should be called on to furnish the advance guard, then the separate parts must be brought up in a different formation than would have been necessary if the division were later to become a part of the main body of the army corps.

It was accordingly stated in the order of the commanding general that all would unite near Parschnitz in order to continue the march from there upon Arnau in one column, and further, that the Second division would join the main body upon this continued march, first halting at Parschnitz for two hours.

This information was absolutely essential for the division commander, but only for him. As soon as Parschnitz had been reached, he would certainly have been there in person and have had it in his power to give the order to halt, personally, to the subdivisions, as they arrived successively, and at the same time to form them as required for the march beyond. Then the separated parts of the infantry brigade, the hussar regiment, the field artillery regiment, and the ambulance company, could have reunited there.

It was therefore sufficient to state in the division order that a union would be effected with the other parts of the corps near Parschnitz. By this the troops learned at the same time that all which would appear on their right flank belonged to the First infantry division, a friendly force.

Now that all necessary information concerning adjoining columns had been given, it further remained to state *what should be done in case the enemy were encountered*. The situation relative to this latter point was very simple, as the enemy could be expected only on the road followed by the advance guard. For the advance guard, however, it would be necessary to add that it must attack at once, as the division commander might possibly not be with it at the moment and otherwise time might be lost.

The order of march may be communicated in different ways, either by a "distribution of troops for June 27" appended to the order, or in the written order itself if the order of march must necessarily be given therein. In the division order for June 27 a blending of both methods occurred, which is indeed customary, for in the distribution of troops given separate from the text of the order the advance guard is specified without indication of the order of march, while in the case of the main body the order of march is laid down. Attention is called to the same by the words "in order of march" under heading "main body."

An order of march when attached should give a comprehensive, easily understood illustration of the entire scheme, but the sheet on which the order itself is written must also be brought directly under the observation of the person for whom it is intended. *Whenever orders are dictated to adjutants in their memorandum-books*, it is therefore well first to give the distribution of troops and then follow with the text of the order. In a distribution of troops that is not at the same time the order of march, troops should be entered according to arm (infantry, cavalry, field artillery) in advance guard and main body. Independent cavalry, which in grand tactics remains under the immediate orders of the commander of the whole, is given separately in the distribution of troops; likewise, detachments sent out under special instructions. *A special commander for the main body* was not designated in this order, as it would appear superfluous to do so. The succession of the different parts of the main body was designed for the purposes of the march; if, however, a fight should take place, the division commander would direct these parts separately. It is nevertheless permissible to appoint a commander for the main body when it appears necessary.

If a *special commander* is designated for a part (as done here for the advance guard), it becomes his duty to form his troops in the manner in which he intends to employ them.

Especial attention should be given to the arrangement of the time for starting. Unnecessary excitement ordinarily causes us to overlook the fact that a mass like a division, even if locally separated, cannot be put in motion simultaneously, and troops are fatigued by assembling them too soon. We never can tell what hardships the day will bring; and therefore all the greater precaution should be taken to avoid unnecessary fatigue.

In the case before us the following calculation served to fix the *time of starting*: The length of the advance guard in column of march, without security distances, was, roughly estimated, nearly 2 miles; the distance from the bivouac of the main body of the advance guard to that of the main body of the division was about $1\frac{1}{2}$ miles. Now, if the main body started simultaneously with the advance guard, its head would collide with the last subdivisions of the latter while still in

bivouac, and must wait about 4 minutes before it could follow. It is, however, desirable to maintain an interval of about half a mile between the two divisions, and so the main body, although located $1\frac{1}{2}$ miles in rear of the advance guard, could fall in 15 minutes later than it. The column of the main body of the division (without the First cavalry brigade) was about $3\frac{1}{2}$ miles long, so its last subdivision would leave the bivouac more than an hour after the head started out. The distance from this place to the bivouac of the cavalry brigade was $1\frac{1}{2}$ miles. The latter therefore needed to start only 45 minutes later than the head of the main body, in order to follow immediately in its rear, by advancing at a walk. After that the cavalry would have to follow the infantry in the mountains for a distance of nearly 7 miles, and could only proceed at a walk during the first 3 hours; it was therefore better to let it remain longer in bivouac, as it could have easily made up the time by trotting part of the way, which is more advantageous than going continually at a walk.

As regards the main body, it should be noted that the starting time as fixed, 4:15, naturally referred only to the Second infantry regiment, which was ordered to take the lead; the Second artillery battalion, which was likewise located close to the highway, did not need to start until 4:30, the Third infantry regiment at 4:40, and the Fourth infantry regiment about 5 o'clock.

It is the duty of commanders to keep these facts in view and have the troops fall in accordingly. Such a course can be pursued, however, only by troops already assembled—in this case, by the bodies united in one bivouac. It is assumed here that infantry heavily burdened in the field can do $\frac{1}{2}$ mile in from 12 to 13 minutes, including short halts.

The First field artillery battalion (Second and Third batteries) and staff, recently assigned to the advance guard, the engineer company, and the ambulance company section must proceed on the highway in proper time to the rendezvous of the advance guard.

If troops come together out of different villages at the same rendezvous, the commander of brigade, regiment, etc., will want to have his entire command together at a fixed time.

If larger masses are ordered to assemble in one place, the arrival of each unit separately at the proper time should be arranged, because waiting unnecessarily fatigues.

Referring to the division trains, the light baggage (led horses and medical-, company ammunition-, ponton-, intrenching-, and tool-wagons) had to follow immediately after the organizations to which they belonged. Special care should be exercised so that led horses are not turned into pack-animals, but can be mounted as soon as needed.

The medical-wagons and the 4 company ammunition-wagons with led horses follow the battalion marching in column. With cavalry regiments the medical- and ponton-wagons are in rear of the regiment. The engineers keep their intrenching- and other tool-wagons with them, as well as their field-miners' wagons.

The heavy baggage, in the same order as the advancing troop organizations, follows the last subdivision of the main body at a distance of from $1\frac{1}{4}$ to 2 miles. To the heavy baggage belong the headquarters, company, and squadron baggage-, subsistence-, and forage-wagons. Each artillery headquarters has one baggage-wagon. With each battery there is a supply-wagon and a field forge. In this case no ammunition columns and trains were assigned to the Second infantry division, because on the 27th the army corps would occupy one road. If the division had been given ammunition columns and several field hospitals, in case of an advance against the enemy these columns would need to be brought up as a first echelon in front of the heavy baggage, in order to have them at hand in action. Subsistence supply columns that might have been attached would have become the second echelon to the heavy baggage.

The field hospital actually present was brought close to the division.

According to circumstances, different dispositions would be allowable relative to distances and distribution of wagons and column. In the case before us due regard had to be given to the narrow mountain defile and the possibility of an engagement in or in front of it. It therefore seemed expedient to leave the heavy baggage of the division at Schömberg or near Berkelsdorf for the time being, and to bring it up when an

engagement might not be likely, upon issuing from the defile. The bringing up of the heavy baggage too soon must especially be avoided under the prevailing conditions. If an unfortunate engagement should have forced a retreat and the baggage had followed too closely, a blockade of the highway could scarcely have been prevented, which in turn might have been followed by a rout. On the other hand, keeping in view the possibility of an engagement, it would appear judicious to take along the field hospital and place it near the rear of the division. In this place also belongs the division bridge train; it should properly be with the engineer company, but in the mountain defile the engineers could have been used with the advance guard although the train itself could not have been employed there. Still it must not be left behind entirely, as occasion for its use might easily have arisen in the plain when crossing the Aupa.

The signal corps detachment found no immediate employment, and followed the rear of the division.

The formation of a special rear guard was not necessary, as an attack on the rear of the column was not expected. Under certain conditions, especially in a country aroused to insurrection, a specially constituted rear guard cannot be dispensed with. Its strength then depends on prevailing circumstances.

Finally, *it must always be stated where the division commander will be located*, so that all messages may reach him. In this case he had chosen his place with the advance guard, because his dispositions would depend on what he found at its front. His presence there, however, was not at all necessary, for if the enemy had been encountered, the commander of the advance guard would have been on the spot for the purpose of ordering what was immediately required. Nevertheless it is highly desirable that the leader of the whole should gain an insight into the measures of his opponent as soon as possible. For this reason, the leader will in most cases keep himself with the advance guard.

Nothing is said in written orders relative to a possible retreat. These orders come into too many hands; and at the very moment when every one must strive only to gain a victory the troops must not be told that their commander enter-

tains thoughts of retreat. If it is desired to give directions regarding a retrograde movement, it is done verbally. In this case, however, no such necessity existed, for even if a retreat from Parschnitz had taken place, no one would have thought of inaugurating it on any other road than the one on which the advance had been made; and should the retreating forces have been obliged by the enemy to take a different direction, all orders previously given would have been useless.

INFORMATION RECEIVED CONCERNING THE GUARD CORPS, AND. CONSEQUENT DISPOSITIONS.

About 1 a. m., June 27, a staff officer of the Guard corps, coming from Liebau, handed the following communication to the commander of the Second infantry division:

Guard Corps,
1st Inf. Divis. Headquarters at Deutsch-Wernersdorf,
Page No. ———. 26, 6, '66, 7 p. m.
To the Commanding General, 1st Army Corps, Liebau:

This division is ordered to march early to-morrow from Dittersbach and Deutsch-Wernersdorf, on the Trautenau road, via Adersbach, Qualisch, and Petersdorf, to Parschnitz, and thence south into the Aupa valley. It is to commence the march when the troops of the First army corps have cleared the road; it will remain near Qualisch until that time, holding itself in readiness to support the First army corps in case of resistance near Trautenau.

In order to enable the division to judge the time of starting, it is requested that the commanding general advise when Albendorf will probably be passed by his troops.

X———,

Lieutenant-General, Division Commander.

Received: Liebau, 26, 6, '66, 11:15 p. m.

Headquarters at Liebau,
26, 6, '66, 11:15 p. m.

Returned to the First infantry division, Guard corps, with the information that the Second infantry division and the First cavalry brigade, located around Schömburg, will take up their march at 4 a. m., June 27, advancing via Albendorf. The column will halt for about two hours near Parschnitz,

awaiting the arrival of the remainder of the corps, which is directed to proceed thither from Liebau. The time of arrival near Parschnitz will depend mainly on the resistance of the enemy, but in no event will it take place much before 8 a. m.

The Commanding General: Y——.

To the Second infantry division, at Schömberg, for its information; then immediately back to the First infantry division, Guard corps, at Deutsch-Wernersdorf.

The commander of the Second infantry division added in the proper place:

Contents noted.

Headquarters at Schömberg, 27, 6, '66, 12:45 a. m.

A——, *Lieutenant-General,*
Commanding Second Infantry Division.

The staff officer then resumed his journey to the infantry division of the Guard corps.

In order that the cavalry brigade might not be cut off from its infantry near Albendorf by reason of the rather late start ordered, the division commander, now informed as to the intended movements of the parts of the army located on his left, felt called upon to give appropriate directions to the cavalry brigade.

The following written message was therefore immediately despatched by cyclist to the commander of the cavalry:

1st Army Corps,

2d Inf. Division.

Page No. —.

Headquarters at Schömberg,

27, 6, '66, 1 a. m.

According to advice just received, the First infantry division, Guard corps, located near Deutsch-Wernersdorf, will move forward early to-day via Adersbach, advancing thence on Parschnitz by the same road that is to be taken by this division.

The brigade will accordingly arrange to reach the rear of this division at the proper time near Albendorf, and avoid being cut off from it by the head of the division of the Guard.

A——,

To the *Lieutenant-General, Division Commander.*

1st Cavalry Brigade,

In bivouac north of Schömberg.

COMMENTS.

The staff officer who came from the Guard corps was accompanied by a mounted rifleman, and had to pass Schömberg *en route* from Liebau to Deutsch-Wernersdorf.

Although this information could be transmitted to Lieutenant-General A—— by the circular letter here employed, such means of conveying intelligence (admissible and frequently done in time of peace) must, as a rule, be avoided in war.

To assure prompt delivery, there should always be prepared as many copies of every order, etc., as there are headquarters to receive it.

After the information had been received by the Second infantry division, no transmission to subordinates was necessary, as no further dispositions were required on their part. Data concerning the march of the Guard division, as far as such was necessary for commanders of separate parts, could be given them by the division commander in person, in ample time at the start, when he must see them.

The fact that the Guard division sent to Liebau for information as to the expected movements of the Second infantry division, which was then stationed at Schömberg and was thus between Liebau and the headquarters of the Guard division, prompts us to give some consideration to the location of various headquarters.

Ordinarily every commander is stationed with the bulk of his troops. When, however, he is part of an army, he must not forget that his movements are dependent on the orders of superior authority and that he should be able to promptly receive the intimations of superior authority's intentions; in this connection telegraph lines will exert material influence. If, for instance, the First army corps had desired to be in communication with the Guard corps by the shortest route, it would have had to transfer its headquarters to Schömberg. As it was, however, dependent on the orders of the commander of the Second Army, it had to remain at Liebau, as the telegraph line there (supposing there was none at Schömberg) assured the most rapid communication with army headquarters.

For the same reason the *division* commander could not remain permanently with his advance guard, no matter how anxious he might have been to be informed early of moves likely to be made by the enemy, as the prompt execution of an order from corps headquarters was more important. Such an order sent by Schömberg (passing therefore the main body of the division) would have reached him with the advance guard, over a mile away, and must be sent back to Schömberg, traveling double this distance, before the division could be put in motion. If there had been any danger in delay, the commander of the advance guard would have been there on the spot to meet any action of the enemy, and assistance from the division would have arrived just as quickly whether the division commander was in Schömberg or with the advance guard.

Failure to duly consider circumstances that influence the selection of headquarters can be shown to have caused unnecessary delay and consequent mischief in war on many occasions.

It should be further noted that either the division commander or his general staff officer should always be present at headquarters; the absence of both at the same time is not allowable. If important orders, messages or inquiries arrive during their absence, division adjutants are not, as a rule, in a position to take appropriate action, for usually they lack general information and knowledge of the intentions of their commander.

ADVANCE ON PARSCHNITZ.

At 3:30 a. m. Lieutenant-General A—— mounted his horse, and, accompanied by his staff, rode forward to the advance guard.

The commander of the Second infantry regiment had been directed to bring the mounted riflemen up to the head of the regiment.

The hussar regiment, the First field artillery battalion (Second and Third batteries and staff), the engineer company, and the ambulance company section had arrived near the reserve of the advance guard. All troops were ready to fall in. On account of the great distance from the enemy, and the fact that hussar patrols had already gone forward on

the only road, the Third battalion, with two troops of the Second squadron, which had been on outpost, had brought in the outpost companies, and were stationed at the southern exit of Bertelsdorf, with a strong patrol ahead.

Major-General B——— had just assembled all his commanders around him and given them the following orders:

"The division will advance as far as Parschnitz on the road to Trautenau, where it will form a junction with the First infantry division, from Liebau.

"Major N——— will take command of the vanguard, consisting of the Third battalion, Fourth squadron, and the engineer company, and will start at 4 a. m. The enemy will be attacked wherever seen. Communication will be maintained with the First infantry division, by means of cavalry patrols, on the roads leading over the mountains.

"Colonel D——— will follow with the two battalions of his regiment, with the First battalion of field artillery in rear of the regiment as main body, at a distance of 700 yards. The caissons of the artillery and the ambulance company section will follow the last battery. The hussar regiment will bring up the rear.

"The heavy baggage will remain assembled north of Bertelsdorf until further orders.

"Messages will reach me with the vanguard."

While the remainder of the Fourth squadron and the engineer company moved up to the Third battalion, the battalion commander hurried ahead and advanced the Twelfth company 350 yards.

A little before 4 o'clock the several portions of the vanguard were formed toward the front in the order in which they were to march off, and at 4 o'clock the advance guard was set in motion, the Fourth squadron advancing farther to the front at a trot.

In order to satisfy himself that the advance guard had been formed as directed, the division commander had the separate bodies march past him at the southern exit of Bertelsdorf, and there awaited the main body of the division. On the arrival of the main body he sent one of his aids to advise the several commanders concerning the march of the First infantry division of the Guard. The aid was also directed

PLAN II

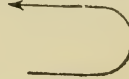
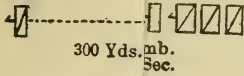
g on Parschnitz

4th Squadr. 14th Hussars.

4th Troop.

2½ Sqdrs.

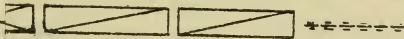
875 Yds. to Main Body of Division.



875 Yds.



1st Cav. Brigade. 1st Horse Battery



rain.
osp.
st.
s.

1680 Yds.

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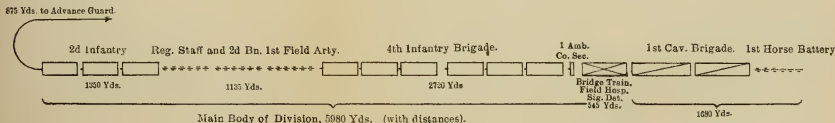
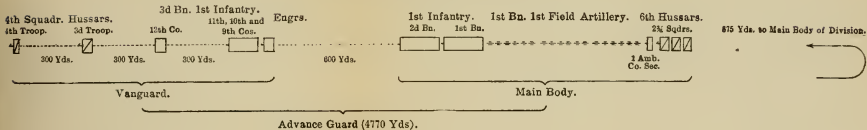
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Order of March of the Second Infantry Division Advancing on Parschnitz Forenoon of June 27.



Length of Column.

Advance Guard	4770 Yds.
Distance to Main Body	875 "
Main Body (Including Bridge Train, Field Hospital, and Sig. Detach.).....	5980 "
Cav. Brigade with Horse Battery.....	11625 "
Total.....	13305 "

Order of March 10, 1900

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FORMATION BEFORE START.
Vanguard.

4th troop. }
 350 yards. } 4th squadron hussars.

3 troops.

350 yards.

12th company. }
 350 yards. } 3d battalion, 1st infantry.

11th company.
 10th company.
 9th company.

Engineers.

700 yards.

Main Body of Advance Guard.

2d battalion. }
 1st battalion. } 1st infantry.

Battalion of field artillery.

Ambulance company section.

1st, 2d, and $\frac{3}{4}$ of 3d squadrons hussars.

to observe whether the column was marching as ordered. Meanwhile the division commander returned to the advance guard.

When the advance guard started, it sent two mounted riflemen to the First infantry division with the following message:

Advance Guard,
2d Infantry Division.

Bertelsdorf,
27, 6, '66, 4 a. m.

To the 1st Infantry Division:

The advance guard started at 4 a. m. from Bertelsdorf, and is advancing on the highway from Schömberg to Parschnitz.

B——,

Major-General, Brigade Commander.

When the head arrived in front of Petersdorf, the division halted for a short while, the column remaining in its formation on the right of the road. On account of the road being in a cut, the guns had to be stacked; yet this would not ordinarily have been done.

A road leading over the mountains near Albendorf had allowed the sending of a hussar patrol to the valley of Golden-Oels, in the direction of Bernsdorf, with the following message:

Advance Guard,
2d Infantry Division.

Petersdorf,
27, 6, '66, 5:30 a. m.

To the 1st Infantry Division:

The head of the advance guard has just reached Petersdorf. Nothing has been seen of the enemy.

B——,

Major-General, Brigade Commander.

At 6:15 a. m. a non-commissioned officer and 6 dragoons of the First infantry division rode up to Lieutenant-General A—— and handed him the following message:

1st Infantry Division.

Beyond Bernsdorf,
27, 6, '66, 5:25 a. m.

To the 2d Infantry Division.

At 4 a. m. this division began its advance on Parschnitz. At a point 1,200 yards north of Bernsdorf it was delayed some time by a demolished bridge, on the further side of which a troop of the Windischgrätz dragoons attacked the

head of the advance guard, being, however, repulsed with loss. The division has just reached Bernsdorf. Hostile cavalry patrols are watching us from the heights.

By command: N——, Captain,
General Staff Officer, 1st Infantry Division.

The envelope that contained the message was indorsed by one of the division aids, in the "received" column, "6:15 a. m.," and then returned to the patrol leader with the verbal remark, "Nothing new on our side."

North of Welhota the hussar troop at the head encountered hostile dragoons, who retreated at an increased gait in the direction of Trautenau when the rest of the squadron approached.

At 6:30 the head of the advance guard infantry debouched from the mountains east of Parschnitz, while the main body of the division reached the northern exit of Petersdorf, and the head of the cavalry brigade was close to and north of Bertelsdorf.

Some mounted men appeared on a line with the western exit of Parschnitz. Other than this, nothing unusual was observed, no troop movements being visible on the Liebau road.

COMMENTS ON THE ADVANCE ON PARSCHNITZ.

Formation of the Advance Guard.

Even in the mountains cavalry must take the "point" in advance guard formations, however limited its employment may be under such conditions. It can only reconnoiter roads, and finds no ground alongside of them for attack in order to drive away an enemy. In this case the presence of hostile dragoons was known. Neither side would hardly have attempted an attack, although dismounted they could occupy villages or narrow passes. In view of this, the advance guard commander would have done better to place the entire hussar regiment at the head; if fired on, it could have dismounted, and with several squadrons (every squadron having about 60 carbines) it might have taken the occupied territory. It would nowadays be useless to bring up a rear with $2\frac{3}{4}$ squadrons (as cavalry with its carbines can open its own way), and besides, it would tire both man and horse considerably.

Cavalry at the head of an advance guard should be supported by one company of infantry, which can easily step aside if the cavalry is driven back, and is sufficient to stop a pursuit. On the other hand, cavalry is easily brought to a halt in regions of narrow roads, and then needs infantry to drive the enemy away.

If the mass of the infantry is allowed to follow the cavalry in close formation, it is impossible for it to get out of the way of the latter quickly enough, if it should come dashing to the rear; it will then be overridden and the whole thrown into disorder.

The formation of a vanguard is prescribed. It should consist of from a quarter to a third of the infantry, with the necessary cavalry and engineers.

Batteries are not divided, and the advance guard commander was right in not assigning any guns to the vanguard.

The engineers must not be too far from the head. A single demolished bridge would obstruct the advance of the entire division. Its restoration could not be effected too soon, and should therefore be taken in hand at once with the force available.

In front of the Twelfth company was the "infantry point," which consisted of an officer and at least a section. On the road it marches in close order, because no lateral reconnaissance is practicable in mountainous country and because the cavalry point is in front of the infantry point. Some cyclists are assigned to the latter to keep up communication with the following vanguard.

In the reserve of the advance guard troops follow in the order in which we would likely wish to employ them if the enemy were encountered. If the vanguard meets stubborn resistance so that the reserve is obliged to take part, then the artillery must prepare the attack as much as it can. It cannot march, however, at the very head of a separate body, and in most cases should therefore follow the leading battalion. On this occasion the battalion of artillery was placed behind the infantry regiment of the vanguard. The first employment of the artillery was only possible near Parschnitz, and until that time it must be under the protection of the infantry.

Colonel D——, who started the reserve, must have the march commence 5 minutes before 4, else the distance from the vanguard would have been increased beyond 700 yards.

Drawing in Outposts.

It is very unwise, in the face of an enemy, to draw in an outpost and place its forces at the head of the column of march. By this the enemy is apprised in the quickest and most certain manner that an advance is intended. It would be well, therefore, to take other troops to the head upon starting the whole, and not assemble the outposts until the former have passed them. However, in justification of the deviation from this course in the case before us, the following may be cited:

The enemy was not so near that he would discover at once the withdrawal of the outposts. His cavalry patrols, which may have dared to come forward in the mountains and have in time observed the drawing in, could only return to their main body in a roundabout way, and would reach there most probably at a time when the march of the advance columns had already been discovered by hostile outposts and duly reported; besides, the hussar patrols were further in front, and a connected outpost line had not been established.

Further, the Third battalion, designated as vanguard, was pretty well united. The company designated for the extreme point was already prepared to start at the exit on the side toward Albendorf. So the drawing in of the outposts of the Third battalion involved neither loss of time nor fear that the enemy would too soon discover the preparations for the march. It was, moreover, a fortunate circumstance that the Third battalion was the subdivision having the best knowledge of the country about to be entered, and in mountainous country such a knowledge has double value. The two troops of the Fourth squadron attached to the outpost, with the exception of a few orderlies and patrols, were still with the reserve of the outpost at 3:30 a. m. If the cavalry picket northwest of Albendorf had again been posted, it would have had to remain there to protect the assembling of the advance guard until the vanguard had approached; and after that, according to orders, the cavalry picket would have had to join the infantry of the

advance guard. The Fourth squadron was united, and followed the scouting patrols in front on the highway.

Order of March.

(See Plan II.)

Advance Guard.

Infantry regiment with light baggage and distances.. . . .	1,350 yds.	
Cavalry regiment less 1 troop.. . . .	350 yds.	
Battalion of field artillery.. . . .	1,115 yds.	
Engineer company.. . . .	120 yds.	
Ambulance company section.. . . .	130 yds.	3,065 yds.
Distance between parts.. . . .		1,705 yds.
Distance to main body.. . . .		875 yds.

Main Body.

(a) Troops.

Infantry regiment with light baggage and distances.. . . .	1,350 yds.	
Battalion of field artillery with regimental staff.. . . .	1,135 yds.	
Infantry brigade.. . . .	2,720 yds.	
Ambulance company section.. . . .	130 yds.	
With distances.. . . .		5,435 yds.

(b) Field Hospital and Trains.

Signal corps detachment.. . . .	11 yds.	
Division bridge train.. . . .	340 yds.	
Field hospital.. . . .	165 yds.	
With distances.. . . .		545 yds.

Total.. . . . 11,625 yds.

Accordingly the column of an infantry division advancing to an engagement is nearly 7 miles long. An order sent from front to rear, going along the whole column of troops, would require about an hour to reach its destination (an order from rear to front probably twice as long).

If the deployment is to be on a line with the vanguard, then the last subdivision of troops has to advance nearly 6

miles, and it will take about $1\frac{3}{4}$ hours to deploy the entire division.

To complete our idea of the length of a mobilized division the heavy baggage must also be taken into account. Its length, without further assignment of subsistence columns or several field hospitals, is about 2,730 yards. In case the troop-wagons are to follow immediately, we would have to add the distance between the rear of the division and head of these wagons, 2,730 yards more. The entire length of the Second infantry division in column of march thus became 17,085 yards, or nearly 10 miles.

In the example before us, however, the cavalry brigade with its horse battery must also be considered.

March length of cavalry brigade.. . . .	1,200 yds.
Horse battery.. . . .	480 yds.
	<hr/>
	1,680 yds.
Heavy baggage.. . . .	510 yds.
	<hr/>
Total.. . . .	2,190 yds.

We consequently have a total length for the column marching early on June 27 from Schömburg, upon Parschnitz, with advance guard formed and heavy baggage left behind, of:

Advance guard, including distances between parts.. . . .	4,770 yds.
Distance from advance guard to main body.. . . .	875 yds.
Main body.. . . .	5,435 yds.
Cavalry brigade.. . . .	1,680 yds.
Signal corps detachment, bridge train, and field hospital.. . . .	545 yds.
	13,305 yds.
If the heavy baggage should follow at a distance of 2,200 yards, add:	
Distance between troops and wag- ons.. . . .	2,730 yds.
Wagons.. . . .	3,240 yds.
	<hr/>
Total.. . . .	19,275 yds.

It should be remembered that all normal march depths here given are only approximately correct. We presuppose that the troops maintain prescribed distances and are at full strength. In reality such conditions do not exist, yet it is immaterial whether the deployment of a division which requires an hour and three-quarters is computed at 5 minutes more or 5 minutes less. The normal march depths are only intended as a guide for a correct illustration, and for this purpose they are amply sufficient.¹

Supervision of the Order of March.

It is urgently recommended that on the march every commander should, as far as practicable, have his troops march past him at least once each day, so he can control their march discipline and observe their appearance.

If the enemy is not near and the presence of the commander is not continuously required with the mass of the troops, it is well to extend this inspection to the heavy baggage and trains attached; otherwise irregularities of all sorts will occur. In the case in hand the division commander could not remain long with the marching main body, as his presence near Parschnitz was presumably more necessary.

Connection with Adjoining Columns.

Connection with adjoining columns, even in mountains, can in most cases be kept up only by mounted men and experienced cyclists; these are, of course, confined to the roads, and a timed return is not to be expected. This, however, is not necessary, provided the other column does not fail to send out patrols also, for in terrain with an obstructed view the object of these patrols is not so much to gather information for the one who starts them out as to orient the commander to whom they are sent. The strongest of these patrols may be quite small; only when the enemy is actually in the vicinity should more mounted men, yet no cyclists, be employed. For this reason the First division dispatched a non-

¹Infantry marches by squads, cavalry by fours, and artillery in file.

commissioned officer and 6 troopers, as its head had already encountered hostile cavalry.

Information received from such patrols is not without value. For example, the advice as to the demolished bridge indicated that the Second division would probably arrive at Parschnitz before the First, and would therefore have to attend to its own security. Furthermore, the attack of the Windischgrätz dragoons on the head of the First division indicated that hostile cavalry was on that road, and that upon coming out of the Parschnitz defile the Second division must send a good-sized patrol to seek the opening of communications with the First division. Finally, if a mountain range lies between the lines of march of two columns, one will never be certain that a combat starting in one valley will be heard in the other. (Reference invited to the Third and Fifth divisions in the engagement of Jicin.)

If communication is established, the detaching of parts of the column not engaged to the other side of the mountain may be of great benefit, especially if they are led against the enemy's rear.

Measures of Security on the March.

A careful reconnaissance of the country, so frequently practiced and which has been carried over from our small peace exercises in grand tactics, was not admissible here. The division would require the entire day to reach Parschnitz if such a reconnaissance were instituted. It is hardly conceivable that a mass of troops which could become dangerous to an entire division could hide in the ground along the highway, and, if a small party should dare to do so, its own existence would be jeopardized.

Furthermore, it is not feasible to have a marching column accompanied by infantry acting as flank cover and advancing over mountains. Even if the latter started at the same time as the advance guard, they would fall far behind on account of the necessity of ascending and descending hills without roads. It is possible to secure flanks in such a manner only where parallel valleys exist permitting detached columns to march through them, unless, however, the sides of

STUDIES IN THE LEADING OF TROOPS.

the valley are most favorably formed. If such conditions do not exist, and cross valleys, on which the enemy might advance, run into the road traveled, then detachments must be sent into them to assure security, rejoining in due time the rear of the marching column.

RENDEZVOUS AT PARSNITZ.

(Map II.)

As already stated, the head of the infantry of the advance guard arrived at the Aupa bridge, before Parschnitz, at 6:30 a. m.

The division commander thence proceeded to the meadows lying to the north, so as to get a better view of the country; close in his rear rode the bearer of the headquarters flag, whom the commander cautioned to keep the flag out of sight whenever in proximity of the enemy.

The country around Parschnitz presented an entirely new aspect. While for the last $4\frac{1}{2}$ miles the troops had marched in a narrow mountain valley with steep sides, in places formed of rocks, the valley now opened into a broad basin, the surrounding hills rising to a moderate height with gentle slopes, their sides being steep in only a few places.

A little over a mile beyond the exit from the mountains, where, on account of their white roadbeds, the junction of the highways from Schömberg and Liebau could easily be traced, the basin again narrowed, the sides forming a defile. Through the opening there the outlines of blue mountains could be seen in the distance, though they appeared to be only half as high as the mountains in the rear, which led to the conclusion that the country there must be more level. The village of Parschnitz stretched in a long line at the foot of the left side of the basin up the defile; in its gardens several large stone buildings and some factory chimneys were visible. To the south of the village the rise of the mountains was comparatively gradual, but about a mile off a higher ridge, thickly wooded, which bordered the distant view, lay in the way of a possible march over them. Its extreme points descended steeply toward the west end of Parschnitz, as well as into the valley in which Raussnitz lay. The Raussnitz valley could

also be surveyed for some distance, bearing the character of a defile like the ground already passed.

Looking further to the west, could be seen the village of Wolta, stretching up the mountain on both sides of the ravine, where the Liebau highway descended into the valley over a spur of the mountains. Several wooded peaks arose from the heights along the highway extending from that village, the elevation of which did not seem so great because of the background formed at a considerable distance behind them by the mass of the Riesen Mountains and the Snow Peak.

It was at once clear to the division commander that the rendezvous ordered at Parschnitz could not be carried out without special measures being taken for security.

Nothing was to be feared from Wolta, because the advance of the First infantry division and its right flank detachment sent via Schatzlar would soon be manifest there. At all events, the defile in the direction of Trautenau, which was situated to the southwest of Parschnitz, must be occupied until the arrival of that part of the First infantry division designated for the advance guard of the army corps, and especial attention must be directed toward the high ground south of Parschnitz and to the Raussnitz valley. Hitherto the enemy could be expected from the front only, a condition of affairs that ceased, however, when the mountains were left. If larger masses of the enemy were near, they could appear only from Königinhof upon Trautenau, or from Josephstadt by Eypel upon Raussnitz, or in the region between—*i. e.*, on the left flank of the column during its further advance.

On account of the non-arrival of the First division, Lieutenant-General A——— was for a moment in doubt as to whether it would not be better to continue the march to Trautenau and get possession of the junction of the roads there and the Aupa crossing. But he was not allowed to carry out this project, as it was clear from the closing paragraph of the corps order that for the present the desire of the commanding general was only to unite the corps on the left bank of the Aupa.

In the meantime the troops had continued the march on the highway. Lieutenant-General A——— sent an order to the First cavalry brigade directing that, as soon as it had

passed Albendorf, it report the fact to the First infantry division of the Guard, and he then proceeded to join Major-General B——, whom he met at 6:30 at the northern edge of Parschnitz at the junction of the road from Wolta.

Major-General B—— had also taken into account the altered conditions of the terrain, and as soon as he had crossed the Aupa bridge, he had instructed the vanguard commander as follows: "Send 1 company and half a troop of hussars to the southern exit of Parschnitz as cover toward Eypel. The hussars should reconnoiter the country beyond Raussnitz. This detachment will return to the division on the arrival of the First infantry division, Guard corps. Also send 1 officer and half a troop of hussars on the Liebau road to obtain information concerning the First infantry division. Inform this officer that only a short time ago hostile cavalry was on that road."

Small cavalry patrols had already been sent out for short distances in both directions. The second troop of the Fourth squadron reconnoitered the heights south of Parschnitz and their vicinity.

The vanguard commander designated the Eleventh company of his battalion (Third battalion, First infantry) to enter the Raussnitz valley, taking the necessary cavalry details therefor from the Fourth squadron, chiefly from the Third troop, which had already furnished the patrols that were previously detached and that had not yet returned. The two remaining troops (Fourth and First), with only a few horses, took station on the road outside of the village at its northern edge, which the rest of the vanguard occupied.

Major-General B—— then informed Colonel D—— that the division would halt, and directed him to assure its security by sending a battalion to the heights south of Parschnitz, the hussar troop already there to be subject to the battalion commander's orders. Colonel D—— thereupon directed the Second battalion, at the head of the main body of the advance guard, to ascend the heights on a road leading southward from Parschnitz, and to cover the division by taking position toward the wooded ridge and pushing out cavalry patrols.

Finally Major-General B—— sent orders to the hussar regiment, in the rear, to come forward at a trot, not on the village road, but to the north of Parschnitz, and to follow the two troops of the Fourth squadron sent west of the village toward Trautenau. Except for this movement, the orders given had already been executed or were in process of execution when the division commander rode up to Major-General B——, and received from the latter the following report: "I have advanced 1 company and half a troop of hussars into the Raussnitz valley with orders to cover toward Eypel until the arrival of the First infantry division, Guard corps. I have also sent 1 battalion and 1 troop of hussars to the heights south of Parschnitz to cover the resting of the division, and half a troop of hussars out on the Liebau road to the First infantry division."

Lieutenant-General A—— approved these preliminary arrangements, and issued the following supplementary instructions verbally: "It is the intention of the corps commander, after we have rested here, to advance with the concentrated army corps beyond Trautenau toward Arnau. This division will then furnish the flank cover on the right bank of the Aupa, and we can at once arrange the troops accordingly. Have Colonel D—— occupy the defile west of Parschnitz with the 2 battalions of the advance guard still in the valley, the First battalion of field artillery (less 1 battery), and the First squadron, and then scout toward Trautenau. You will personally guard the heights south of Parschnitz with the rest of your troops, and I shall have the other regiment of your brigade come up with you."

In accordance with these instructions, the brigade commander gave the necessary directions to Colonel D——, at whose disposal the following troops were then placed: First battalion and 3 companies of the Third battalion of his own regiment; 2 troops of the Fourth squadron; 1 battalion of field artillery less 1 battery.

The $2\frac{3}{4}$ squadrons, united under their regimental commander, the Third battery, designated by the artillery battalion commander, the engineer company, and the ambulance company section, were directed by Major-General B—— to proceed by the road leading out of the village toward the

south, to the Second battalion of the First infantry (Hill 290); while the Second troop of the Fourth squadron, already sent thither, had gone forward toward the center of the wooded ridge.

These dispositions were made about 7 o'clock. At that hour the Twelfth company of the First infantry, which was at the head, had reached the western exit of Parschnitz, and the two troops of the Fourth squadron in front had already passed through the short defile about 700 yards distant. From there the leading subdivisions of the main body of the division, which were nearing the exit of the Schömberg defile, were plainly visible.

Lieutenant-General A—— had yet to give appropriate orders to the main body and to designate the respective stations to the arriving troops. He therefore instructed his general staff officer as follows: "Ride back to the bridge over the Aupa and direct the Second infantry to proceed to the heights south of Parschnitz, there to report to its brigade commander. As to the rest of the main body, direct the Fourth infantry brigade to rendezvous west of the Wolta-Parschnitz road, the Second battalion of field artillery and the cavalry brigade to the east of the road with the former holding the right wing, and behind these latter the bridge train, signal corps detachment, and field hospital."

In making these dispositions the division commander had not mentioned the ambulance company section, but the general staff officer would have known that it should join the other trains.

At 7:10 the general staff officer reached the bridge, which was in the nick of time, the head of the Second infantry having just started to cross. The regiment immediately changed direction to the left. At 7:25 the battalion of artillery arrived at the same place and was given direction on the spur of the mountain projecting from Wolta across the Liebau highway; there it halted and formed close column faced to the west. At 7:40 the head of the Fourth infantry brigade came out of the defile; at 8 it had reached the junction of the two highways west of the Wolta-Parschnitz road, the right wing (First battalion, Third infantry) halting 100 paces from the Liebau road, the other battalions forming as for assembly

on the left in one echelon. As each battalion was in place it proceeded to stack arms and unsling knapsacks, falling out to the front in order to make room for those in rear. The Fourth infantry regiment formed the second echelon, reaching its place at 8:25. The cavalry brigade followed at 8:45, forming in brigade column, the regiments in regimental column beside each other, the battery in line behind them. (See Map II.)

The general staff officer availed himself of the opportunity to seize newspapers found in the postoffice at the Aupa bridge. The postmaster stated that the telephone connection with Trautenau had just been severed, and some civilians passing by, when questioned about the enemy, pretending not to understand German, answered him in the Bohemian language.

At 18 minutes after 7 the division commander received by a mounted rifleman a verbal message sent by Colonel D——, who was in advance on the Trautenau road, to the effect that the bridge across the Aupa near Trautenau was barricaded and occupied by the enemy, the hussars who had advanced against it having been fired on. Lieutenant-General A—— replied that the detachment must keep the enemy in sight, but otherwise confine itself to the occupation of the farm-houses located in the defile southwest of Parschnitz.

At 8:40 the patrol sent to the First division had returned, with the following report as delivered by the officer in charge: "I found the First division north of Golden-Oels, where the destruction of a large bridge is delaying its march. The commanding general, to whom I reported, had the division halt there, but it will resume the advance at 8:30. No hostile cavalry was visible, but according to the statement of an inhabitant of Golden-Oels, from 30 to 50 Austrian dragoons near Gubersdorf, who had come from the direction of Bernsdorf, at 7 o'clock disappeared in great haste in the mountains in a westerly direction."

The patrol was then directed to join its squadron, located west of Parschnitz.

Meanwhile the greater part of the troops had passed to their new positions under the eye of the division commander, who noticed several irregularities in the movements. In one

infantry regiment the shoulder-straps were rolled up instead of being buttoned. In several battalions stocks had been removed and coat collars opened, which was indeed quite proper, as the heat was already intense; in other battalions the men had done the same thing, but without orders. In one regiment two cases of sunstroke had occurred. Contrary to regulations, in the Fourth infantry brigade the cartridge-wagons advanced in close order in rear of the regiments, and some of the led horses of the cavalry looked more like pack-animals. All these irregularities were at once corrected; and an aid made note thereof, in order to call the attention of the entire division to them later in the day.

In the meantime, Lieutenant-General A—— reiterate the caution that soldiers must not enter the village singly, but that men sent to get water must be assembled and taken there by officers. The Fourth brigade furnished the sentinels needed to enforce this regulation, and also a non-commissioned officer's post at the junction of the Wolta road with the Liebau highway, on the latter of which no one was to pass. He then proceeded to Colonel D——'s detachment, to examine the territory in front with a view to a possible subsequent advance.

It may be of interest to review more closely the dispositions of the several detached parties.

Colonel D—— had reached the southwest side of the group of houses located in the defile about 1,100 yards in front of Trautenau, with the Twelfth company, which was previously at the head of the vanguard. The two hussar troops that had advanced toward Trautenau had found the Aupa bridge barricaded and had been fired on, a report of which action, as we have seen, having been sent to the division commander. As the region up to the bridge could be observed from the farm-houses, the hussars were withdrawn behind them. With the approval of Colonel D——, the commander of the Third battalion now sent the Tenth company to the height 875 yards north, with half a troop of hussars charged to patrol toward Hummelhof, while the Ninth company remained in reserve behind the farm-houses. The First battalion of the First infantry (in double column) and the First artillery battalion (less the Third battery), also the remaining $1\frac{1}{2}$ troops of hussars, halted on the west edge of Par-

schnitz, while a half-platoon of the First battalion of the infantry with 2 mounted orderlies waded across the Aupa and took post as left flank cover at the southwest extremity of the steep wooded ridge. The employment of cavalry was discouraged by the abruptness of the declivity. The two companies in the first line each kept a platoon under arms and rested under their protection, without unslinging knapsacks.

At 7 o'clock Major-General B—— had left the northern border of Parschnitz for the central peak of the wooded ridge to the south (Hill 504), where he arrived 6 minutes later; the Second battalion of the First infantry was halted on the unwooded peak (Hill 299); the Second troop of the Fourth squadron reconnoitered the woods and reported to the general that nothing could be seen of the enemy south of it. It was learned that the woods were about 400 paces wide, and that the slope was not so steep as it had appeared to be from a distance, although the last portion was the most difficult to ascend, though practicable even for artillery, provided one did not go too close to the wings of the ridge descending toward the Aupa, where the slope was so great that infantry could ascend only in extended order. The brigade commander then went to the southern edge of the woods, to observe the country with a view to the necessary dispositions for security and a possible further advance.

A line of ravines extending from Raussnitz to the farmhouses on the Liebau highway separated the wooded ridge from the heights in front in a pronounced manner, up to a point of junction which was nearly 450 yards southwest of where the general stood (Hill 504), whence the ravines descended steeply in both directions to the Aupa. South of the connecting saddle rose a new ridge, which extended westward to the southern end of Kriblitz and on which there were two peaks (531 and 554) that overtopped the general's position. This confined the view to the south to about $\frac{3}{4}$ of a mile. Toward the west and south the country was considerably lower and permitted a good survey for about 2 miles. Toward the west was the deep Kriblitz ravine, behind which were plainly visible the Hopfen and Galgen Mountains and a part of Trautenau. Up to this ravine the terrane seemed to be a tolerably level decline sloping toward the Aupa and divided

from the valley by a steep border. Toward the south the country appeared generally to fall, but presented a very hilly and obstructed character on account of a great number of low peaks and patches of timber. Many farm-houses (the southern extension of Alt-Rognitz and Rudersdorf) stood out against the horizon which bordered the intermingling wave-like lines of the terrane. No connecting roads were visible toward the south, but the highway from Raussnitz to Trautenau led over the projecting saddle into the western region toward Kriblitz.

Under these circumstances it was sufficient to post a small patrol where the general was then standing. A post pushed forward to the heights south of the saddle would discover the approach of larger bodies soon enough to make possible the occupation of the southern border of the woods in ample time. The ground was not so favorable, however, for a flank movement covering the army corps when continuing the march. As from Trautenau the corps must follow the road to Arnau, the direction of Hohenbruck alone seemed available for this purpose, and there the march of the flanking column across country would encounter considerable difficulty. Hardly any course remained, therefore, but to use the road from Raussnitz to Kriblitz for the greater part of the troops, especially the artillery, and then to see if there was not a road uniting it with Hohenbruck. This could be settled at once by a reconnaissance. Some cavalry must nevertheless skirt the march on the left, and follow the direct route to Hohenbruck.

The Second troop of the Fourth squadron was already moving toward the height east of Kriblitz.

Having oriented himself, Major-General B—— dispatched his aid to bring up the Second battalion of the First infantry, with an additional troop of hussars, but to instruct the remaining troops to move up to the north side of the wooded ridge and halt there. At 7:30 the Second battalion reported to the general. The Fifth company, with 2 mounted riflemen, was sent ahead to the fork of the Raussnitz road, and it advanced a platoon to Hill 531. The rest of the battalion stacked arms north of Hill 504. The troop brought up from the Third squadron was sent forward to scout in the region be-

tween Alt-Rognitz and Raussnitz, and both this troop and the Second were also directed to reconnoiter the roads leading to Hohenbruck.

Major-General B—— then repaired to the main body of his detachment, whose last division reached the rendezvous designated at 7:50. These troops consisted of the Second infantry regiment, 2½ squadrons of hussars, the Third battery, 1 company of engineers, and 1 ambulance company section.

The third body detached from the division (specifically, the vanguard of the advance guard) at this moment consisted of the Eleventh company of the First infantry and half of the Third troop of the Fourth squadron of hussars which had gone into the valley of the Aupa leading to Raussnitz. The company established itself in the garden of the most southerly farm, sending half a platoon 550 yards to the front, which, in addition to the sentry over the arms, established a double post on the highway and one on the right slope of the valley, from whence the valley itself could be seen for a long distance and communication be subsequently established with the Second infantry regiment. The half-troop of hussars, excepting two mounted orderlies, advanced toward Raussnitz.

Such was the situation of the main body and detached portions of the division when the division commander went forward on the Trautenau road at 8:35. As he arrived at the western exit of Parschnitz (8:40) a hussar officer handed him the following message from Major-General B——: "A strong hostile column of all arms is approaching Trautenau on the highway from Königinhof. At 8:10 its head was about 1,300 yards south of Hohenbruck."

COMMENTS ON THE RENDEZVOUZ AT PARSCHNITZ.

A connected consideration of the arrival of the division at the rendezvous brings out the following facts:

At 6:30 the head of the advance guard infantry reached the Aupa bridge and entered the ground designated for the halt. In order to cross the space which the main body of the division required for rendezvous, and in order to gain suffi-

cient ground in advance so it could act as cover, it had to continue its march until 7:10.

At 7:30 the troops taken from the column to serve as flanking parties reached their designated stations.

At 8:45 the last portion of the entire division arrived.

Leaving out of consideration the infantry point, the period of the division's deployment was from 7:10 to 8:45, 1 hour and 35 minutes. Deducting the cavalry brigade, which was attached only as an exceptional measure, the division would still require 1 hour and 12 minutes to deploy. In this case, however, it is presumed that the *advance guard and main body kept a certain interval*, and that consequently the latter did not form up on a line with the advance guard, but before reaching it.

If the deployment of the column had been effected *at the place where the infantry head halted*, the figures would have been changed materially, as follows:

For a column, including cavalry brigade, 13,285 yards long, 2 hours and 20 minutes; if heavy baggage follows (19,257 yards), about 3 hours.

For an infantry division without cavalry brigade, with advance guard formed on line with it, without heavy baggage (about 11,600 yards), 2 hours; with heavy baggage (about 16,400 yards), 2 hours and 45 minutes to 3 hours; without advance guard formed (troops in uninterrupted succession), without heavy baggage (about 8,740 yards), 1 hour and 30 minutes; with heavy baggage (about 14,000 yards), 2 hours and 20 minutes.

From this it is seen how much time the deployment of large bodies generally requires. *Every deployment should therefore be avoided unless absolutely necessary.* For a short rest, all that is needed is a simultaneous halt in the marching column. Every deployment is a "readiness," which is not required on the mere probability of an engagement, but when an engagement is inevitable, and therefore only when the advance guard meets with resistance in its progress. In general a possible deployment depends upon the enemy, and cannot therefore be anticipated, and in any case is dependent on the terrain and one's own purposes. The ground should facilitate it, and it provides the position behind which it is pro-

posed to fight, or the battle-field on which an attack is intended. In the latter case the deployment should not be made too soon, because an advance in order of battle is very tiring and consumes time. If the advance guard has found a somewhat tenable position, it is better to remain in marching column until the same is reached; or, if it is desired to attain some objective without fighting, the troops should deploy only when forced to.

In the case before us corps headquarters had ordered a general rendezvous on the Aupa. When the Second division reached Parschnitz, the First division, which had to provide the advance guard, had not yet come up, and as it was not practicable to proceed further, no time was lost to the whole or various parts by the deployment. In addition, on debouching from the mountains the enemy could be expected, and it was proper that preparations should be made for an engagement if it could be done without loss of time, especially in view of the fact that a simple halt on the narrow mountain road would not have been judicious.

Measures of Security Taken.

It is but natural that a force in the vicinity of an enemy, whether marching or assembled in rendezvous, should secure itself. In level country with an unobstructed view this duty can be performed by the advance guard, and even a small force will be sufficient. The more difficult the terrain and general conditions, however, the more care must be exercised. As a rule, either too much or too little is done in this direction. The "too little" may pass a thousand times with impunity, but when once the troops are thereby surprised, the reputation of their commander suffers for a long time. In consequence of this the other extreme is frequently resorted to, though at the expense of the men's strength. It must never be forgotten that when troops are to be given a rest, it should be done as thoroughly as circumstances will permit.

This matter is especially neglected in the employment of cavalry, both in theory and practice. In moments when a few patrols would suffice, entire regiments are frequently sent to the front. While the other arms rest, the cavalry is on the move. We forget that while men can be encouraged by fair

words and spurred on by ambition to renewed activity, it is quite different with the horse, which must eat, drink, and rest. We certainly can demand much of a horse that has been well fed and in good condition at the start; but such conditions are rare, and even then we should not unnecessarily waste the strength of animals.

In the majority of cases the smallest patrols will suffice. Good riders on good horses and possessed of the requisite boldness can venture a great deal, especially when hostile cavalry is not about.

The less the country is open to view, the more numerous should be the cavalry patrols sent out, which then need a supporting body of their own arm. For this reason the flank party of Major-General B—— sent out a whole troop in each direction, both west and southwest.

If larger bodies of the enemy are in the vicinity and his cavalry is at hand, the latter will not permit our cavalry patrols to look into his lines. So if we wish to orient ourselves with regard to the enemy, too much cavalry cannot be brought forward and to spare it would be an error. Often in such cases we may find it necessary to fight in order to see. Our experiences in the campaign of 1870-1 should not govern in this connection, for the French cavalry did not oppose us in an efficient manner.

The sending forward of cavalry should be regulated from these points of view, and it is insisted that reconnoitering and scouting at long distances, under all circumstances, is particularly the duty of cavalry. But it is the duty of higher leaders to solve this problem with proper economy, for he who exhausts his cavalry before the engagement commences, can certainly expect nothing of it either during or after the fight.

As specially concerns the measures for security, it may be seen here how they and their sphere extend in proportion to the strength of the bodies to be protected. An advance guard can cover the front of its division for a certain breadth, but only in the rarest cases will it suffice for the protection of the flanks of an isolated division, whether on the march or in position—such security can only be provided by new detachments.

So the vanguard of the advance guard covered itself by a troop of hussars sent to the heights south of Parschnitz, the

entire advance guard by a battalion and this troop, and the division by 4 battalions, 3 squadrons, and 1 battery. The greater number of troops advanced for purposes of security, the further may they be pushed forward and their sphere of scouting and security extended.

While the one battalion detached from the advance guard could only secure toward the wooded summit of the mountains, the larger detachment which followed made it practicable for the flank cover to reach far beyond it.

If, however, the enemy can approach only from one direction, through a defile, then smaller forces will suffice, according to the formation of the defile. This is exemplified by the case with regard to the Raussnitz valley, already mentioned. Hostile parties could advance through it from Josephstadt, via Eypel. The advance guard had to protect itself against this, which it did with a company of infantry and half a troop of hussars. Under the conditions of terrain that there existed, this cover was ample too for the division; accordingly it was not reinforced, but ordered to remain there until the Guard arrived.

But to keep all these detached bodies under arms would purchase the rest of one half the division at the expense of the other half. Yet this was not at all necessary, for by pushing out mixed detachments 1,100 or 1,600 yards toward the west or south, the balance of the division would be fully covered, and these detachments need only to provide for their own safety within narrow limits.

So it comes to pass that in reality only the double posts and the scouting cavalry cannot obtain rest; but even if we did not count in the advanced troops of hussars, the following force was necessary for the security of the division:

Infantry.

From First regiment:

10th company.. . . .	1½ platoon.
12th company.. . . .	1 platoon.
1st battalion.. . . .	1½ platoon.
2d battalion.. . . .	1½ platoon.
11th company.. . . .	1½ platoon.

Total.. . . . 3 platoons.

Cavalry.

From First hussars:

With Colonel D——'s detachment:

4th squadron $\frac{1}{2}$ troop

With Maj.-Gen. B——'s detachment:

4th squadron 1 troop.

3d squadron 1 troop.

With 2d company, 1st infantry:

4th squadron $\frac{1}{2}$ troop.

Total 3 troops.

Approximately, 250 infantry and 110 to 120 troopers.

Concerning other dispositions that were made, it remains to be stated that, after debouching from the Schömberg defile, the conditions which had up to that time demanded a separation of the hussar regiment ceased upon arriving in the plain of Parschnitz and before Trautenau, and consequently the separated parts had to be reassembled.

Disciplinary Measures Taken within the Rendezvous.

In conclusion, the following remarks may be made regarding the points found fault with by the division commander:

The rolling up of shoulder-straps prevents troops from being promptly recognized, which is particularly needful and important in time of action. Moreover, in chancing upon single men (stragglers, for instance) we should be able to ascertain at once to what organization they belong.

Removing the stocks may afford great relief under certain circumstances, but no deviation from the regulation dress can be left to the discretion of individual commanders. Such matters are ordered by regimental and battalion commanders; otherwise one body of troops would march with helmets and another with caps, one would carry the knapsack on foot and another in wagons. Such relief must be ordered for all by the commander of the whole. If one body of troops enjoys a relief that another does not, then discontent, disorder, and want of discipline easily ensue. Therefore we should insist, in war as well as in peace, on the observance of regulations, and when a departure from the same becomes desirable, as in

the instance before us, it should be ordered by the commander of the column. Yet it must not be forgotten to direct such relief when there is a necessity for it. It has been stated that details of the Fourth infantry brigade were made to carry water. The parts of the division that were in the Aupa Valley would have no difficulty in quenching their thirst, but it was different with the troops on the heights on the left bank of that stream. The latter, when going through Parschnitz, had to leave behind their water-carriers, or else drink on the march while passing through the village.

With reference to the loading of the regulation wagons and the detail of men to accompany them, it may be well to quote here two circulars which were actually issued on the day in question :

“Company baggage-wagons were overloaded, especially with unslung knapsacks, in such a manner that they were unable to keep up during the day’s march. The greatest evils can arise from this. Commanding officers will at once stop this overloading and see that only such articles are carried on the wagons as are permitted by regulations.”

“The commanding general to-day has again observed that too many men are detailed with the heavy baggage, including orderlies, quartermaster sergeants, and sergeant clerks, all of whom do not belong to the wagons, but must remain in the ranks. Regimental and battalion clerks were also with the wagons, and as a rule they do not belong there, but if they are sent to the baggage, men out of the ranks cannot be ordered there in addition. To every regulation wagon there should be detailed only 1 man, as a clerk or a non-combatant, and with a supernumerary wagon only 1 man for every 2 vehicles at the utmost, no matter what the wagon may be loaded with.”

PROBLEMS.

In order that the student may derive full benefit from this work, it is suggested that whenever he comes to a place in the text where certain dispositions of troops are called for, he make these dispositions himself, according to his own ideas, before reading the solutions given.

For instance, on page 1 is found a presentation of the general situation, which states that the Second infantry division and the First cavalry brigade arrived at Schömberg on June 25. Following this is a statement of the special situation with regard to the Second infantry division, for the better understanding of which a terrain sketch is added. On page 3 the bivouacs of the various units are announced, but it will be to the student's advantage if, before reading the announcement, he plan for himself how these bivouacs should be arranged.

It is true the fact that the troops are already entered on the sketch will naturally interfere with such a problem. Even so, the question could take this form: "Will I divide the troops in the same manner as shown in the sketch?" The answer will be, "No"; for a little reflection will show that if the two divisions bivouac around Liebau and Schömberg, it would be advisable for them to secure the exits of the defiles across the frontier, which could be accomplished all the more easily by reason of only cavalry being in their front. Their advance guards should therefore be sent forward to these points.

Thus the first disposition given in the text leads to some study. The omitting to send the advance guards forward can only be explained by the order not to cross the frontier, for the time being, with larger bodies. This leads to a further question: "What may have induced corps headquarters to give such an order?" The answer is found on page 11.

From this it is evident that circumstances leading to a particular situation materially influence the dispositions that must be made, and that therefore new situations lead to new dispositions. All that is necessary to initiate these new questions is to alter the task assigned to a subdivision, the terrain upon which it operates, or its strength. In all these directions entirely different measures must frequently follow, especially when alterations are made also with respect to the strength, distance, or position of the enemy.

The following will serve as examples for new problems:

1. The Second Army remained on the Neisse. The First army corps, sent to Liebau, was charged to draw the enemy's attention upon itself, and to make him apprehensive of

an invasion from that direction into Bohemia, without, however, taking the offensive beyond that point.

2. The First army corps, by itself, had been sent forward to cover the frontier. If attacked by superior forces, it should give way in a northerly direction.

In both of these events the problems would become: Position of the army corps. Points of view for determining further conduct in order to accomplish the tasks.

3. Take the situations given in the text and 1 and 2 above, and suppose that in each case only a division, instead of a corps, was at hand, or that the work had been assigned to a detachment of 3 battalions, 4 squadrons, and 1 battery.

4. Suppose that the roads were in mostly level country, covered with small patches of timber, farms, etc., instead of in the defiles of a mountainous region. Solve all previously given problems on this basis.

5. Suppose it was known that there were large hostile forces of all arms at Trautenau, or that these had already sent forward their advance guards to Gubersdorf and Petersdorf.

As an illustration of how such changes necessitate different measures, we may cite the following:

If, in the event of giving way before strong forces of the opponent, the retreat should take a northerly direction, then the main force would belong at Liebau, and a detachment only should be sent to Schömberg.

If, instead of being mountainous, the country was open and level, it was not absolutely necessary to directly cover both roads from Liebau and Schömberg to Trautenau; this would lead to an unnecessary dispersion.

On the other hand, if the corps should unite around Liebau and hold the road from there to Golden-Oels, an indirect securing of the Schömberg-Trautenau road could be accomplished by sending a detachment forward into the country east of Bernsdorf. This body should remain in the closest connection with the main body and advance guard, and in view of this the march of a hostile column upon Schömberg would appear to be a very hazardous undertaking.

Furthermore, in practicable country the service of security falls to the cavalry. The entire First cavalry brigade could then be sent far in advance, for the support of which only

a few battalions and some artillery would be required, and the formation of other separate advance guards could be dispensed with.

Further on in the text we come to the actual establishment of the outposts. Here too, as in all other cases, the student should picture to himself how that work would be performed, before reading the text. Later the outpost formations that would be judicious in the case of the varying situations above mentioned could be considered. The following questions are most intimately connected with such dispositions: What special measures are required in case of hostile attack? Shall the advance guard fight? In what position shall the attack be accepted?

The following problems, among others, also suggest themselves:

Page 6: The hussars sent out toward Braunau send in word that the enemy in considerable force has taken up a position close to the south of the town, and that the advance guard of the Guard is already engaged there. Required: order of the Second infantry division for the start; message to headquarters of the First army corps; advice to the Guard-corps; instructions to the advance guard commander, who is to remain in position toward Trautenau.

Page 7: 1. Give a sketch of the order of the Second infantry division for June 27 after receipt of corps order.

2. Give a sketch of the division order if the corps order dispensed with the uniting of the corps near Parschnitz, and directed instead that the Second division advance to Trautenau and go into bivouac there as advance guard, while the First infantry division remained near Parschnitz. (This order should not provide for contingencies that cannot yet be foreseen.) Indicate the position of the division and its outposts if it reaches Trautenau without seeing anything of the enemy except cavalry patrols.

3. What place in the order of march should be assigned to a battalion of riflemen and a battalion of the corps artillery regiment, should such happen to be with the division?

Page 39: Give the orders for the advance from Schömburg and Bertelsdorf if it is intended to assemble the outposts later.

Page 41: 1. Upon coming out of Petersdorf, the advance guard reports the approach of a hostile column from the direction of Parschnitz. Give the dispositions of the commander of the advance guard.

2. The head of the advance guard reports that infantry and apparently a battery of the enemy had occupied a position on the right bank of the Aupa, south of Parschnitz. Give the orders of the commander of the advance guard; also the dispositions of the division commander.

3. When the vanguard approached the point of exit from the defile near Parschnitz, hostile cavalry of the strength of about 6 squadrons, with 2 batteries, are seen in the plain north of the village. How will the debouchment of the division be conducted under these circumstances? Give the orders of the respective commanders.

4. The advance guard has reached the southern exit of Albendorf with the head of its main body when heavy artillery firing is audible from about the direction of Bernsdorf. In the direction of Parschnitz only hostile cavalry patrols have so far been seen.

5. The same situation, except that simultaneously the advance of a hostile column from Parschnitz on Petersdorf is reported.

6. The head of the division has arrived at Parschnitz; so far only hostile cavalry patrols have been visible. The division receives orders to continue the march to Trautenau and occupy bivouacs on the heights south of the village. Give the orders for security of the march.

With regard to this method of study, it may be added that, in cases where the student makes dispositions with reference to the situation presented in the text, *before* he sees the solution given therein, the latter offers an opportunity to learn a different view of the case. He either finds his own view confirmed, or he notices deviations therefrom. If the latter, it leads to reflections as to what motives these deviations may be based on, and it permits a comparison of such motives with those that he himself had in mind when making his dispositions.

It will be noted, however, that in all problems the student frames for himself by changing the situations of his own ac-

cord, he of course loses the outlines that would be given by an instructor. Yet in spite of this he will not fail to derive much benefit, as all earnest reflection on war situations is in itself of value, and this will be the greater as such changes in individual incidents call forth deviating measures. And then another question will be: "Will not the dispositions made in one case answer in another? If not, why not?" Indeed, it is quite true that new ideas are developed by a variation in the original situation, whereby we may well consider whether they could not be applied also in the first solution.

Such exercises will be especially instructive if a number of students congregate to study them together.

In conclusion, there is still another way in which these studies may be of benefit for the student without instructor. Let him place himself in the position of a particular commander—for instance, the commander of the Third battery. Then let him picture to himself in what position the events place him, upon what questions he must direct his attention in the various situations, where he should personally be at each moment, and what dispositions he should make. This can be carried even so far as giving several commands verbally. And for this also the joint study of a number of officers, especially of different arms, is highly recommended. Yet such work is necessarily laborious, and presupposes the earnest desire to give as much time as possible to progressive studies. This we all need to practice incessantly, for even a person with the most favorably equipped intellect will accomplish greater results if he applies himself to his purpose with zeal and industry.

PART II.

EXPULSION OF THE ENEMY FROM TRAUTENAU.¹

We left Lieutenant-General A——, at 8:40 a. m., on the western edge of Parschnitz, just as he received the report of the enemy's advance. His first order was for the troops to get under arms again, yet the situation required further measures. Should the enemy continue his march beyond Trautenau, Colonel D——'s detachment, which had been pushed forward toward the town, must very soon be involved in an engagement which would affect the whole division.²

The question was, "Should the division be deployed in a defensive position in case of contact, or would it be more judicious to advance to the attack of the enemy?"

¹The experiences of the campaign of 1870-1 are evidence of a higher demand for education in the subject of troop-leading. The greatest gallantry will no longer suffice against destructive fire; it must be supplemented more than ever by intelligence. This should admonish us to devote ourselves with unceasing care and solicitude to our education.

The less we can hope to accomplish by merely rushing ahead, the more study should be given to the situation before us, and to maneuvering as conditioned by the terrain. This increases the demands on the intelligence of the leader, from the lowest to the highest.

While in Part I. we considered only dispositions concerning the march, we now direct our attention to the engagement itself, and more particularly to the maneuvering.

²Colonel D——'s detachment, west of Parschnitz, consisted of the First battalion and 3 companies of the Third battalion of the First infantry regiment, 2 troops of the Fourth squadron of the First hussar regiment, and the First battalion of the First field artillery regiment, less the Third battery.

The first alternative was in accordance with the orders of the corps commander, who had desired to assemble the entire corps near Parschnitz; the second was in accordance with the plan as announced, to continue the march beyond Trautenau in the direction of Arnau. In view of the reported approach of considerable hostile forces, the second alternative could probably only be accomplished by a fight for the possession of the heights of Trautenau which would become more difficult the longer the enemy was allowed to establish himself there. For this reason Lieutenant-General A—— resolved to advance to the attack of the enemy. As the arrival of the remaining parts of the corps could confidently be expected in about an hour and a half, the division would not be dependent on its own forces alone in carrying through the engagement.

The next question was, "How can the attack be best initiated?"

This much was certain—the enemy could no longer be prevented from occupying Trautenau. Further, the character of the terrain did not permit an advance of the main force against the city and along the highway; such an advance must be flanked most thoroughly from the heights on the right bank of the Aupa. And even should an advance be successful, the group of mountains rising abruptly south of the town would form a position that could hardly be taken from the front. For the same reason an advance of the main body over the mountains in a westerly direction did not appear practicable, as it also would eventually lead to a frontal attack on this strong position.

In any case the Aupa must be crossed and the right slope of its valley ascended. This could be done without an engagement only near Parschnitz, where Major-General B——'s detachment had already obtained a firm hold on the right bank, while a further advance of the main forces toward the Trautenau-Königinhof road would turn the strong position of the opponent and would threaten his probable line of retreat; by this the region north of Parschnitz would be cleared, making room for the deployment of the expected parts

of the army corps, which would not be the case if the Second division remained on the plain; besides, the direct line of retreat to Schömberg would be maintained.

The crossing of the Aupa near Parschnitz would require that the defile southwest of that village be held, under all circumstances, until the arrival of the First infantry division. The detachment of Colonel D——— was available for this purpose; and although the detachment had only seven companies of infantry, it was not probable that the enemy would advance in the plain along the Liebau highway as soon as the main body of the Second division advanced against Trautenau over the heights on the right bank. Moreover, the defile could be easily defended; the deployment of large hostile forces for its attack could hardly be accomplished before 9:30; and the immediate support of Colonel D——— by the First infantry division could be expected soon after 10 o'clock.

Lieutenant-General A——— therefore determined to take the offensive, on the right bank of the Aupa, with his principal force, and gave the following instructions to Colonel D———, who was with him: "The enemy is advancing from Königinhof upon Trautenau. I shall cross the Aupa with the division at Parschnitz, and move against his right flank. Meanwhile you will hold your position until the arrival of the First division, which will probably be about 10 o'clock; if, however, the enemy should evacuate Trautenau earlier, you will follow him on the highway. The cavalry brigade will move up to your support, and you will place yourself under the orders of its commander."

At the same time the general staff officer of the division was sent in advance upon the opposite bank of the Aupa to reconnoiter the enemy and the terrain.

The division commander then returned to the main body, which had already fallen in, and at 8:50 gave the following orders, in part verbally to those immediately concerned, in part through his aids:

To the commander of the artillery regiment: "Lead your Second battalion east of the Parschnitz church on the heights and join the head of the Fourth brigade."

To the Fourth infantry brigade: "The brigade will march immediately to the heights by the roads leading out of Parschnitz to the west of the church. The Second battalion of field artillery will place itself at the head."

To the First cavalry brigade: "The brigade will at once move up to the support of Colonel D——'s detachment, which is west of Parschnitz on the Trautenau highway. Major-General L—— will at the same time assume command of the detachment of Colonel D——, who has already been given instructions."

To the bridge train and signal corps detachment: "The division bridge train and the signal corps detachment will return to the north exit of Parschnitz and take position in the meadow north of the road."

To the chief surgeon: "The division will probably be engaged on the heights of the right bank of the Aupa. Have the ambulance company and the field hospital follow the troops in that direction, obtaining the necessary wagons for the transport of the wounded by requisition on the town. I shall send you some cavalymen for this work."

A mounted rifleman was directed to conduct to the chief surgeon half a troop from the First cavalry brigade.

Having made these dispositions, hastening on in advance of the troops just starting, the division commander repaired to Major-General B——'s detachment, and as he crossed the southern edge of Parschnitz he noticed that the parts of the detachment were already in motion and were entering the woods in their front. At the same time a mounted rifleman approached him bringing the following message:

3d Infantry Brigade. Heights south of Parschnitz,

27 June, 8:40 a. m.

On account of the proximity of the enemy, the brigade is holding the southern edge of the woods lying in front of its position.

B——,

Major-General.

When Lieutenant-General A—— arrived at the northern border of the woods, the last subdivision of the Third infantry brigade had also entered it, and at the same time the

first cannon-shot was heard in the direction of Trautenau, to which the First and Second batteries were seen to reply from the plain. The horse battery was also seen advancing at a rapid gait. (9:10 a. m.)

After passing through the woods, the division commander came upon the Third field battery in a covered position near Hill 504; along its side the Second infantry regiment was deploying; farther off and in its front was the Second battalion of the First infantry, near Hill 531, which was situated to the southwest and from which Major-General B—— was then returning; and the hussar regiment could be seen in its advanced position extending to the patches of wood north of Alt-Rognitz. Hussar patrols appeared on the heights toward Kriblitz, some of them skirmishing with hostile cavalry between that village and Alt-Rognitz, other than which all that could be seen of the enemy was a battery in action on the northwestern slope of the Hopfen Mountain, behind which, however, heavy clouds of dust arose, intimating the presence of marching forces.

Upon coming up, Major-General B—— said: "According to reports of hussars, the head of the enemy's column reached Hohenbruck at 8:30. Its rear, as I have personally observed, has only just now entered the village. I therefore estimate its strength at about a brigade. The patrols sent southward by Alt-Rognitz were forced to fall back before the enemy's uhlans, the reports of whose strength vary from 1 to 4 squadrons, but up to that time they had only seen a few wagons on the road. Just now the hostile cavalry is behind the patches of wood between Kriblitz and Alt-Rognitz. The hussar regiment sent forward against it was met with infantry fire out of the bushes. It was my intention to occupy the edge of the woods here, so as to secure the division against an advance of the enemy on this side of the Aupa."

By this the division commander was convinced that the approaching forces were as yet inferior, a fact which demanded all the more that they be promptly attacked. It was a question, however, whether they formed the advance guard of a corps in the rear. However that may be, the resolve taken by Lieutenant-General A——, based on the general situa-

tion, could not be changed. He therefore informed Major-General B—— that it was not necessary to occupy the border of the woods, as the Fourth brigade was now advancing and he intended to attack the opponent. As the Fourth brigade, however, had not yet arrived, the division commander, for the time being, directed his whole attention to the terrane, in order to arrange his further movements judiciously.

As already stated, the ridge (531 and 554) extending toward Kriblitz divided the region south of Aupa into two sections. Caution demanded that the main forces be led forward in the northern section along the right bank of the Aupa, in order not to disperse them too much and endanger the communication with the troops in the valley. For should the enemy in course of time show himself to be superior and advance along the border of the valley, Lieutenant-General A——'s command might not only be separated from the First infantry division, but also crowded away from its own line of retreat. And on the other hand, an attack across this ground would lead the division against the apparently very strong position south of Kriblitz.

But if the principal attack was transferred to the region south of the mountain range, this position could not only be turned, but the enemy probably forced to rapidly evacuate the heights south of Trautenau. If the latter was not done by him soon, all that could be hoped was to involve him in a serious fighting condition on his withdrawal.

Yet with all these advantages, the latter plan entailed the disadvantage of considerably extending the division, for in any case the country to the north of the mountain range must not be left out of consideration, and if serious resistance was encountered between Kriblitz and Alt-Rognitz, the rearmost troops would probably have to be employed too soon.

Notwithstanding this, Lieutenant-General A—— resolved to make the principal attack in that direction, for if it was successful, then the Trautenau defile would be most quickly opened. This, for the moment, was of the greatest importance. The division commander was convinced that for the time being his forces were superior to the enemy, but he could not tell whether this would be the case an hour later. So far no further movements of troops on the Königshof road were

reported, and the quicker advantage was taken of the enemy's isolation the better would be the chances of success. In addition, the danger of a premature disposal of the reserves was to some extent neutralized by the expected arrival of the First infantry division, as well as the proximity of the Guard division, which could reinforce the first line.

Meanwhile, having dismounted, he gave the following instructions to Major-General B——, commanding the Third brigade (9:23): "Attack the enemy with your 4 battalions and the battery, in the direction of Kriblitz. I shall put the Fourth brigade in motion south of the mountain ridge leading toward the village, against the enemy's line of retreat. Keep your right wing at the edge of the valley during the advance, and do not abandon it under any circumstances. I shall have the hussar regiment reconnoiter the left flank."

Major-General B—— made his dispositions at once. The Third horse battery advanced to the next mountain spur (Hill 366) and opened fire on the enemy's artillery on the Hopfen Mountain (9:35). The Third battalion of the Second infantry formed up in two echelons in company columns, with the left on the Raussnitz-Trautenau road, and on the same line with it and on its left was the Second battalion of the First infantry. The remaining two battalions of the Second infantry formed company columns and covered themselves north and south of Height 366.

In the meantime the division commander's views were confirmed by the report of his general staff officer, who at 9:32 returned from the height in front of Kriblitz:

"The enemy is preparing to take up a position on the heights south of Trautenau. His forces do not seem to be very large, for he has only brought 1 battery into action, and I could only see 2 battalions in its vicinity. The ravine in which Kriblitz lies is deeply cut, and on the other side is covered at its southern end with a dense wood, so that an advance over it presents great difficulty. On the other hand, the region south of the range of heights, extending along our front, offers no material obstacles to an attack. Furthermore, only a small force of infantry and 1 to 2 squadrons of uhlans could be seen in it."

The general staff officer was then instructed to prepare the report to the corps commander of the intended advance, and the same was signed by the division commander.¹

Meanwhile the head of the Second battalion of field artillery had reached the edge of the woods (near Hill 504), and at 9:35 the commander of the artillery regiment and the commander of the Fourth brigade, Major-General C——, joined Lieutenant-General A——, who gave them the following orders: "The Third brigade will attack north of the mountain ridge in our front in the direction of Kriblitz." Then turning to Major-General C——: "Continue the march with your brigade to the left of it in the direction of Alt-Rognitz. The hussar regiment which you see below will reconnoiter on your left flank." Then to the commander of the artillery: "Let the Second battalion go into position on Hill 531, which you see before you."

As this movement must take place under his own eyes, the division commander retained the Fourth brigade as a reserve. If its head should also encounter the enemy, he could either put in the entire brigade, or retain a part of it as a last reserve, as he thought best. Orders were sent to the hussar regiment to attach itself to the left wing of the advancing Fourth brigade and to reconnoiter on the left flank of the division, at the same time holding itself in readiness to take part in the engagement.

As soon as the head of his brigade, which was marching in two columns, had reached the southern edge of the woods (near Hill 504), Major-General C—— considered it necessary to separate his two most advanced battalions into company columns; those that followed remained in column of march, but halted for a short time to re-establish order, as they were somewhat disturbed by the difficult march, and to close

12d Infantry Division.
(Message No. 1.)

Hill 504, south of Parschnitz,
27, 6, '66, 9:35 a. m.

To the Headquarters, 1st Army Corps:

A hostile column of all arms, estimated at a brigade, has just reached Trautenau from the direction of Königinhof. The front of its position is difficult to force. The main body of this division has therefore crossed the Aupa near Parschnitz, and, holding the Liebau highway, is advancing to the attack on the right flank of the enemy.

A——,
Lieutenant-General.

up, whereby a distance of 435 yards was gained from the leading battalion. Meanwhile the view the division commander had entertained of the effect of the advance on the enemy's left flank was strengthened by the first move in its execution. Although the enemy's artillery on Hopfen Mountain at first replied with a few shots to the fire of the Third battery, in a few minutes its guns were limbered up and left the position. Soon, too, clouds of dust rising in unbroken line in the cut of the woods leading from the Hopfen Mountain to Alt-Rognitz indicated the rapid retirement of a hostile party, while small columns were observed on the high points which rose to the south of this cut, moving in a southerly direction.

Under these circumstances the division commander would gladly have hastened the advance of the Fourth brigade, yet he recognized that this would lead to a disorderly advance, and he refrained from urging it here, as the desire of the troops to get at the enemy needed to be curbed rather than incited. Furthermore, nearly all parties were then in motion, and the battalion of the Third brigade advancing along the crest of the heights (Second battalion of the First infantry) soon became involved in a musketry engagement with the enemy's infantry on the slope turning into the Kriblitz ravine.

The division commander then remounted his horse and rode toward Hill 531, south of the Raussnitz-Trautenau road, where he had a better view of the two brigades during their advance.

At 9:50 the situation was as follows:¹

The deployed leading battalions of the Fourth brigade were crossing the ridge on both sides of the station of the division commander (531). The Second artillery battalion was stationed north of Hill 531, under cover, with thickets extending partially across its front.

The battalion of the Third brigade already mentioned was halted in action on the western slope. Further to the right the Third battalion of the Second infantry was nearing the northern part of Kriblitz; the skirmish line was about to go through the village, but so far not a shot had been fired there. The First battalion went to the right, the Second battalion to

¹See Map III.

the left, in company columns in two echelons, past the Third battery. The engineer company was behind the right wing of the detachment. One ambulance company section was halted under cover 220 yards east of the Third battery, while the other section was trying to find a road through the woods in the rear of the Fourth infantry brigade.

Nothing could now be seen of the enemy on the Hopfen Mountain, while the northern edge of the small woods south of Kriblitz was strongly occupied by hostile infantry. From the trend of events so far Lieutenant-General A—— became convinced that the partial engagement of the enemy had taken place only to cover his withdrawal. He had no doubt regarding the attainment of his immediate object, the opening of the Trautenau defile; but there was still a possibility that the situation might be turned to further advantage by inflicting serious losses on the enemy if he should succeed in impeding his flank march. This, however, could only be accomplished by his left wing, in which case the present reserve would be abandoned and a new formation developed.

Lieutenant-General A—— therefore gave the following order to Major-General C——, who was still with him: "Continue your advance with the Fourth brigade in the direction of the wooded hill (425) northwest of Alt-Rognitz and press the enemy, who appears to be withdrawing. In the meantime the Third brigade will take possession of Trautenau and the heights south of it." (9:50.)

An aid was sent with the following order to the Third brigade: "The brigade will immediately take possession of Trautenau and the heights south of that city, to which point the detachment under Colonel D—— will also be sent."

This officer was further instructed: "As soon as the enemy has evacuated Trautenau, the engineers should examine the crossings over the Aupa at that place, and, if necessary, re-establish them. Then find the cavalry brigade and direct it to hastily follow the enemy through Trautenau or west of the city in the direction of Königinhof, and at the same time have a squadron reconnoiter the road to Arnau. Major-General L—— should be informed that the detachment of Colonel D—— is no longer under his command." (9:55.)

From his position the division commander could still overlook the movements of both brigades. The Second battalion of field artillery took position behind Hill 531 and opened fire on the northern border of the Kriblitz woods, regardless of the infantry fire that there reached it. The enemy soon left the woods on the approach of the right wing of the Fourth infantry brigade, but occupied the patch of woods at the northwestern exit of Alt-Rognitz (Hill 425) as well as the ground along the cut in the road leading from there to Hohenbruck. In the Third infantry brigade, the Second battalion of the First regiment, which had hitherto been in action, disappeared in the southern part of the Kriblitz ravine, while the Third battalion of the Second infantry was engaged in ascending the eastern slope of the Hopfen Mountain, the remaining two battalions of the regiment following at about 650 yards.

The artillery fire ceased almost immediately. The leading battalions of the Fourth brigade (Third of the Third infantry and Third of the Fourth infantry) had sent out skirmishers as soon as they came up to Hill 531. The four other battalions so far in march had formed columns of platoons, the regiments alongside each other. As soon as the top line of the depression in the terrane between Alt-Rognitz and the Kriblitz woods (500) was reached, fire was opened. Then infantry appeared, ascending the declivity on which the little woods of Kriblitz are situated, while parts of the Third brigade had halted upon the Hopfen Mountain.

At 10:25 the little hill near the northwestern exit of Alt-Rognitz (425) had been evacuated by the enemy, and the battalions of the Fourth brigade disappeared from the division commander's view as they descended behind the depression in the terrane (500). Accordingly the commander went forward toward the north corner of Alt-Rognitz, and was met *en route* by his general staff officer, who had accompanied the advance of the Fourth brigade, and who reported: "The enemy is retiring in a southerly direction. The region in front appeared to have been occupied by 2 battalions, to cover his march. Only a brief skirmish took place with these, as they withdrew soon upon our approach in the direction of Neu-Rognitz, where they were joined by 3 to 4 squadrons of dragoons and uhlans. A larger column was also plainly visible

retiring on the highway toward Neu-Rognitz, but it has such a start now that it will be difficult to inflict any injury upon it. I have seen a few of the enemy's dead, which, according to their uniform, belong to their Twelfth regiment. In all probability we are therefore opposed by a part of the Tenth corps."

At the same time an aid from the Third brigade brought the following message: "The enemy has evacuated Trautenuau and is withdrawing upon Hohenbruck. The brigade is holding the town, and is forming on the heights south of it, in order to pursue the enemy. The bridges over the Aupa are not damaged."

This officer was sent back with directions that the brigade must await further orders on the heights south of Trautenuau, and that the engineer company should attach itself to the brigade.

The artillery fire of the enemy having commenced again, the general proceeded to the little hill near the northwestern exit of Alt-Rognitz. Arriving there at 10:40, it was found that the view to the west was much limited by an elevation running parallel with the highway. Hohenbruck and the main road were almost entirely hidden by it. A better view could be had of the country to the south, for the elevation declined in several terraces toward Alt-Rognitz and Rudersdorf. Dry ravines running from a wooded elevation on one of these terraces (527) to the church of St. Paul and St. John formed two oblique undulations on this slope. Beyond the most distant a group of hills arose, the highest point of which stood out, in the far distance, beyond Neu-Rognitz. Half-way up its slope this village could be seen, partially hidden by thickets. On both sides of it and at the same height an uninterrupted forest seemed to envelop the group of hills.

The enemy evidently intended to take position again near Neu-Rognitz, as it was plainly seen that he was about to occupy the thickets lying before the village, through which his last infantry and cavalry parties were retreating, and 3 batteries could be seen at his disposal, standing under fire before the village between the little thickets.

On the side of Lieutenant-General A——, the leading battalions of the Fourth brigade were descending the northern

slope of the hollow northwest of Alt-Rognitz, while the four other battalions followed across the meadow in columns of platoons, passing closely by the position of the division commander. The Third troop of the Third squadron accompanied the advance of the Fourth infantry brigade on its left wing. The hussar regiment ($2\frac{1}{2}$ squadrons) tried to get through Alt-Rognitz toward the south. On Hill 531 the Second battalion of field artillery again came into action, firing on hostile bodies that again appeared ascending to Neu-Rognitz. Toward the northwest several wooded peaks near by completely obstructed the view, so that nothing could be seen of the Third brigade.

Lieutenant-General A———'s first act was to issue the following instructions to Major-General C———: "Take a covered position with your brigade on both sides of this height (425). At the same time secure your left flank by occupying the nearest farm-buildings." (10:45.)

It was clear to the division commander that the intended continuation of the advance on Arnau could not be carried out as long as the enemy made a stand near Neu-Rognitz; equally plain was it that the more time there was allowed the enemy, the more difficult would it become to dislodge him. But more important than either of these considerations was the fact that although the Fourth brigade was at the commander's disposal for carrying out an attack, yet the entire division was not available, and that the brigade would be destroyed in the execution of an energetic attack before the Third brigade could support it. Although he had one brigade under his eye, he could not see how matters stood with the other. A serious engagement had not yet taken place, but nevertheless the course of events had widely separated the division into three parts, and his first concern must be to reunite his command. It was then a question with him whether for the time being the attack should be continued, or the arrival of the other portions of the corps and the decision of the commanding general should be awaited.

For the present he could be satisfied with the secured possession of the Trautenau defile. The commanding general might arrive at any moment, and it could not be known under prevailing conditions whether he intended to advance farther

on the Königinhof road or establish himself firmly on the right bank of the Aupa with his entire corps. If the Second infantry division attacked the enemy, there would be no other alternative for the commanding general than to lead the remainder of the corps on the same road to its assistance. Under such circumstances it did not seem proper to Lieutenant-General A—— to anticipate his superior's intentions, so he determined to assemble his division in such a way that he might effectually meet any attack by the enemy, and also utilize the ground for his own advance.

Accordingly, at 10:55, he sent the following written order to Major-General B—— by two mounted riflemen: "The Third brigade, with the Fourth squadron of hussars and the First battalion of artillery, will hold the highway and move up to the cut in the Alt-Rognitz-Hohenbruck road, taking up a covered position toward Neu-Rognitz."

Then he sent the following verbal order to the First cavalry brigade, by an aid: "The enemy has fallen back on Neu-Rognitz. Your brigade will advance to the west of the Trautenau-Königinhof highway and observe his movements."

He also despatched the following written instructions to the hussar regiment, by a mounted rifleman: "Your regiment will watch the enemy to the east of the highway, and at the same time examine the ground toward Eypel."

The orders given the Fourth brigade were gradually carried out, the two leading battalions moving back, under a heavy artillery fire, and occupying the wooded hill (425) as well as the adjoining buildings in Alt-Rognitz. During this retirement the Second battalion of field artillery attempted to draw the fire of the hostile guns upon itself, the First and Second battalion of the Third infantry took position southwest of Hill 500, covered by a patch of woods, and the First and Second battalions of the Fourth infantry withdrew from the hostile fire by taking up a position north of Hill 425. (11:10.)

After the infantry had occupied their new positions, the artillery on both sides continued firing, while the division commander and his staff returned to Hill 500.

Meanwhile the general staff officer had inquired of the nearest battalions whether any prisoners had been taken. At

length he found some hostile infantrymen who had lingered behind on the retreat from the Kriblitz woods. He reported the result of their examination to the division commander as follows:

"According to the statements of prisoners, we are confronted by the First infantry brigade of the Tenth corps, under command of Colonel N———. The prisoners belong to the same regiment as the dead already found, but they assert positively that the other regiment of the brigade (a regiment of uhlans) and artillery is also present. They could not state how many batteries. Their brigade bivouacked since day before yesterday in a village close to the highway, and advanced to Trautenau early this morning, where they had hardly arrived when the engagement commenced. The march to Trautenau had occupied only about an hour and a half. It seems that the brigade therefore came from Praussnitz-Kaile.

"They cannot state where the other brigades of the corps are located. As late as the 25th they marched with a large part of the corps through Josephstadt, where the brigade was soon afterwards detached. Since then they have seen nothing of their commanding general."

On the whole, these statements confirmed the views entertained. The fact last mentioned might lead to the assumption than on the morning of that day the corps must have been quite far away from this brigade. Had this not been the case and had the brigade, as advance guard, been the usual distance before the corps, the commanding general would most likely have informed himself in person on the 27th regarding conditions at his front. On the other hand, it was nevertheless strange that the enemy, who could not have escaped noticing the superiority of his opponent, should have again disposed himself for action in the immediate vicinity.

Yet these were only assumptions. It was still possible that the commanding general of the Tenth Austrian corps was present with the brigade, though the prisoners had not seen him. Various assertions were made, yet without any decided information being obtained, as to whether stronger forces of the enemy were in the neighborhood. At all events, it appeared necessary to advise corps headquarters of what

had taken place, and an aid, accompanied by a mounted rifleman, was accordingly despatched with the following message:

2d Inf. Division. Hill 500, northwest of Alt-Rognitz,
(Message No. 2.) 27, 6, '66, 11:15 a. m.
To the Headquarters, 1st Army Corps:

In consequence of the advance of this division on the right bank of the Aupa, the enemy abandoned the position of Trautenau after a slight action, and has posted himself at Neu-Rognitz.

So far he has shown the First brigade of the Tenth corps, 3 batteries, and several squadrons, which have apparently been at Praussnitz-Kaile since the 25th; nothing has as yet been learned of other forces.

I am assembling the division between Alt-Rognitz and Hohenbruck, holding the road to Königinhof, and await further orders.

A——,
Lieutenant-General.

Lieutenant-General A—— then directed his general staff officer to go to the Third brigade and examine the country along the highway with regard to attack and defense, and to ascertain from there all he could of the enemy.

From the chief surgeon, who had in the meantime come up, he received the following report: "The losses worth mentioning are only those of the Second battalion of the First infantry, which occurred in the attack on the Kriblitz woods; for these, however, a dressing station established in Kriblitz is all that is necessary. The small number of wounded in the Fourth brigade have for the present been sent to Kriblitz, as well as an ambulance company section. Twenty-one wagons have so far been requisitioned in Parschnitz: these are being taken to Kriblitz with the field hospital."

To this the general replied: "I cannot yet tell whether the engagement will assume greater dimensions. Have the field hospital and the wagons take a covered position behind the Kriblitz woods."

Further communication was interrupted by a report brought by a non-commissioned officer of hussars, from Major-General B——, as follows: "His Excellency, the commanding general, has just arrived with the Third brigade."

Whereupon the division commander rode down the western slope of the hill, and, taking the cut in the woods north of the Alt-Rognitz-Hohenbruck road, accompanied by his staff, proceeded at a gallop to join the commanding general. It was now 11:30 a. m. At the same time the leading portions of the Third brigade could be seen to occupy the thickets south of the cut in the road. The division was therefore in position to carry out any dispositions of the commanding general.

TIME CONSUMED IN DEPLOYING.

It was 8:40 when the news of the enemy's advance reached the division commander. Although the latter issued his orders at once, the entire division was not deployed on line with the advance guard until 9:50, an hour later, the movement having naturally been delayed by the mountainous terrane. These figures show how essential it is to reconnoiter the ground in front for a great distance, even for an assembled division.

The enemy did not seriously delay the advance, and at 11:30 the division was assembled on the Hohenbruck-Alt-Rognitz line, and in possession of the ground needed for the debouching of the army corps from the defile.

The detachment of Colonel D—— and the main body of the Third brigade had to pass over a distance of about 3 miles, and the Fourth brigade nearly $2\frac{1}{2}$ miles, after the deployment of the division was effected. Only the four battalions under Major-General B—— and the two leading battalions of the Fourth brigade executed a part of this march in battle formation, the four others proceeding in columns of platoons, but roundabout routes and counter-marches could not have been avoided, even if events had been otherwise or had the leader so wished it.

When it comes to practice, we must discard the ideas of the drill-ground concerning movements of deployed masses. On the drill-ground a brigade can cover $2\frac{1}{2}$ miles in 40 minutes. But when the terrane loses the character of a parade, it is entirely different, and the time needed increases with the difficulty of the terrane and size of the force. In this case, the advance of some separate bodies took half as much time again,

and others twice as much, as if the ground had been level. In this case it did not appear to be necessary for the several parts of the first line to maintain the same alignment. But had the united division advanced at once, with brigades formed beside each other, much more time would have to be allowed for covering the ground. And right here we may state that by forming columns of platoons too early and soon afterwards extending them in company columns, the commander of the Fourth infantry brigade rendered the advance of the two leading battalions of his infantry regiments more difficult; in order to facilitate the march and to have his forces more available for later employment, it would have been better had he left them remain in column of march.

Imagine for an instant an advance of deployed masses on such ground as this. Here a battalion in column of platoons encounters a steep height or a patch of woods, and has to fall back behind the other battalions; in another place a deep ravine compels one part of the company column to make a detour; here a plateau permits an unhindered advance, while just alongside, in a valley broken up by ditches and pools, progress can be made only with difficulty. To help pass these obstacles, an art of troop-leading is required. Often a leader must guide an entire column as it changes direction, due, for instance, to difficulties in terrain or new dispositions on the part of the enemy. Then come movements to keep the troops out of the enemy's sight, and especially out of his artillery fire. But if, actuated simply by a desire to get at the enemy, the leader pays no attention to these matters, keeping in view only the rapid advance of the subdivisions most favorably situated, then battalions of different regiments will soon come together and become mixed up either in one place or another, while elsewhere gaps will be created; and instead of a well-ordered brigade, ready for any employment, we will have a mass lacking in order and consequently hard to lead. A good leader must keep this in mind, even though a loss of time in the case of deployed brigades and divisions may result. In the extended maneuvering of large masses, Infantry Drill Regulations prescribe that points of march direction shall be designated with precision, and preclude independent flank movements being taken among the troops themselves; in cases of

necessity, however, communication should be established between such parties.

Especial value should be placed on these matters if it is *a question of retreat with deployed masses.*

RESOLUTIONS OF THE DIVISION COMMANDER.

When the division had arrived at Parschnitz and Lieutenant-General A—— learned that the bridge over the Aupa at Trautenau was barricaded, he saw no necessity for the immediate seizure of that town. But as soon as he was apprised of the advance of a hostile force of all arms on the Trautenau-Königinhof road, he immediately broke up his troops and made dispositions to gain possession of this important point.

From this it would seem that the general was rather inconsistent in his process of reasoning. If he attributed such a high degree of importance to the occupation of Trautenau, it would have been simpler to continue the march there at once and seize ground for debouching, than to lose valuable time and permit the enemy to bring up reinforcements.

As we know, for a moment the general hesitated, undecided whether he should go beyond the corps order or simply follow its letter, which stated that it was important first to unite the corps at the exit from the mountain passes, on the left bank of the Aupa. He decided to pursue the latter course, and so he permitted the division to complete its deployment for the rendezvous.

It is questionable whether he decided correctly. For the time being his forces had no further independent task; the part given him was now performed; he had arrived at the rendezvous at Parschnitz.

But let us closely examine the corps order once more. It says positively: "It is of paramount importance that the corps be concentrated at the earliest possible moment in a position on the left bank of the Aupa near Trautenau, both flanks protected against the sudden approach of hostile forces." To carry out this intention the division had done all that was in its power; it was in place. No reproach could fall on its commander if he awaited, near Parschnitz, the arrival of the other

division and further orders from the commanding general.

However, the order referred to contained some very important intimations concerning the intentions of corps headquarters, in that it stated: "The corps will unite there¹ and halt two hours, except that the First infantry brigade (First infantry division), designated as advance guard, will *continue the advance on Trautenau and occupy the city*. The march will be resumed in one column *in the direction of Arnau*." But the First infantry brigade, which was to occupy Trautenau, was not on the spot, the column of the right wing, as learned from a messenger, having suffered some delay by the destruction of a bridge, so that the task assigned to one of its parts could not be carried out.

Nevertheless, it was intended by the corps commander to occupy Trautenau and also to continue the march beyond that town, and Lieutenant-General A—— knew this to be the case. If, therefore, he had occupied Trautenau when his division arrived at Parschnitz and failed to find the First division there, although he certainly would have gone contrary to the wording of the orders, yet he would probably have been in accord with the intentions of corps headquarters.

Thus in war different measures may be taken, without our being able to say that this one is correct and that one is false. And more frequently does it happen, as in this case, that although there may be no objection to one decision, yet the other would be the more advantageous.

If the corps order had stated that the column first issuing from the mountains near Parschnitz must seize Trautenau, all doubt would have been removed. But this was not done. The troops to perform this task were rather distinctly designated, all other dispositions of corps headquarters were based thereon, and what was conclusive for the decision of Lieutenant-General A—— was, that nothing had changed in the general situation since the corps order was issued.

That Trautenau had been occupied had been known for several days, and that it had not since been much reinforced could be inferred from the fact that the advancing column had not been met with a single shot.

¹At Parschnitz.

Under these circumstances, Lieutenant-General A—— could hardly have been reproached for not occupying the town. But the situation assumed a different aspect when the approach of strong hostile forces on Trautenau was confirmed, and it became possible that the enemy would make a strong position of the place, instead of merely an observation post.

It was certainly clear that even if the opponent should not advance beyond Trautenau, the division could not continue its rendezvous near Parschnitz with its head only 1,300 yards from the enemy. Two alternatives were then open to the division commander, each of which appeared equally justifiable. He could either occupy a position astride the Aupa on both sides of the defile southwest of Parschnitz, and thus cover the debouching of the rest of the corps, or he could attack the enemy in an effort to gain possession of Trautenau. The former would be in accordance with the expressed will of corps headquarters and could incur no censure, the latter would be the bolder course and would still be within the published intentions of the corps commander. We must again call attention to the fact that the corps intended to march beyond Trautenau in the direction of Arnau, and to do so must occupy Trautenau. And the possession of that town could be bought only the more dearly the longer the enemy was allowed to establish himself there. Furthermore, conditions under which the commanding general had issued his original orders had now changed.

Instead of finding only an observation post at Trautenau, it was certain that its occupation would be opposed by a still larger body of troops. *Under such conditions a leader of troops must consider whether a deviation from the orders given him is in the interest of his superior's intentions, as they are known to him.* In this case such a deviation could in no wise be regarded as unjustifiable.

We have already discussed the conditions that led to Lieutenant-General A——'s decision as to which bank of the Aupa he should initiate the attack on. Inasmuch as the arrival of the First infantry division was expected, he could direct the crossing of the Aupa near Parschnitz, and the advance on the right bank, with only 7 companies, 9 squadrons, and 18 guns covering the main road. If, however, he had

to depend on his own forces to carry through the engagement, he would not have dared to take the mass of his troops so far from the main road. On the right bank of the Aupa, however, the movement took an apparently unusual course, as the two brigades of the division (as yet relying wholly upon itself) gradually came up alongside of each other, and thereby increased the front extension of the division to nearly 2 miles.¹ Such a dispersion is too great for an attack, and only peculiar conditions can eliminate the danger that is inherent in it.

In our engagements of 1866, as well as in the campaign of 1870-71, we certainly found divisions extended for greater distances than in this case, yet it can not be asserted that they were always the result of faulty generalship. In 1866 the superiority of our infantry equipped with breech-loaders permitted such a course. In 1870-71, during the period following the overthrow of the Imperial Army, it was justifiable because the newly formed forces of the Republic were only in loose formations, instituted under the pressure of the moment, whose innate qualities made them decidedly inferior to our troops. Both of these instances, however, are unusual; in the first period of the campaign of 1870 they were exceptions, and must also be considered so in future wars. We should rather turn to such conditions that always develop in the case of equally good opponents with approximately similar armament and chiefly depending for success on the destructive effect of the magazine gun.

In a frontal attack we must therefore be prepared to suffer tremendous losses. A few moments will decide the fighting capacity of companies and battalions, and second and third lines are needed as reserves, to fill up the rapidly occurring gaps.

At distances of less than 1,100 yards, a well-led skirmish line ought to be able to disperse any column advancing without cover or unprotected by its own skirmishers; at distances less than 1,600 yards the loss should be considerable.

Unless well prepared and sufficiently supported by artillery, a frontal attack on infantry in good position nowadays

¹In bringing troops into action, as a rule, it is not admissible to deploy two brigades alongside of each other in the case of an independent division; when, on the contrary, divisions are not dependent upon themselves, it can frequently be done.

has little prospect of success; even a considerable superiority in no wise guarantees against failure. Nevertheless the advantage possessed by infantry in the assault is not to be underestimated, in that under good discipline it may concentrate its fire on a certain point in the line of defense and exert the principal pressure on places designated for the final assault. A well-planned attack will not expose closed troops to hostile fire until the latter has been subdued or at least lessened by skirmish fire. On level ground the prospect of a successful attack does not rest upon rapidity of action or assumed special formations or upon definite rules, but it rests on the plentiful use of numerous swarms of skirmishers, whose well-conducted fire at mid-range strikes the vital points in the defender's line and so subdues it. After that, closed bodies may be ordered to the assault without hesitation, and then only a rush, regardless of consequences, can lead to the goal.

Well-trained infantry with magazine guns need not fear a frontal attack even on level terrane.

Although a threatening of flanks should, wherever practicable, be combined with a frontal attack, we should never lose sight of the fact that by a deep formation alone can we prevent the threatened falling to pieces of an entire body of troops in consequence of large losses.

The advantages of infantry fire are, however, greater on the side of the defense, and the more skirmishers the defense can deploy the greater will be the effect produced by their inherent power.

Even if relatively small reserves will, as a rule, suffice for such skirmish lines, we must never overlook the danger to which the flanks are always exposed. The longer the line, the greater is this danger. And where the terrane or adjoining forces do not furnish protection, troops should be placed in echelon behind the threatened flanks.

It can be proved that in the campaign of 1866, when the long lines of our infantry were forced to fall back, their withdrawal was always the effect of a flank attack, or even of a threatened flank attack when reserves were no longer available. In this way the advance guard of the Fifth army corps had to fall back at Nachod, its right in the woods of the Wenzels hill being turned only by 1 battalion, while frontal attacks

of very superior forces were shattered by the effect of its fire. In consequence of this, the center of their long line was also involved in retreat, and only when the center and right wing were reinforced by fresh forces and were reunited in a narrow space with their flanks secured, did they succeed in repulsing the attack of the superior opponent on the edge of the plateau.

Near Trautenau, however, the 8 battalions of the Second infantry division were not so fortunate, in a joint action against single bodies of the advance guard between Alt-Rognitz and Hohenbruck. Extending in a line nearly 2 miles in length, the mere *threatening* of the left wing, which was not supported, gave an impulse to retreat, which was gradually yielded to by other parts, and finally by the right wing. Although in this case the ensuing frontal attacks were repulsed with great steadiness, yet the continued retreat brought these masses in no way together, but all the further apart, and the unprotected wings found no support.

We can hardly count on the flank attack of a hostile brigade being any longer brilliantly repulsed by a few companies, as was done by the left wing of Tümppling's division at Gitschin. Just as little can we count on being opposed again by the shock tactics so popular with the Austrians in 1866, by which single battalions can force the withdrawal of vastly superior forces.

Consequently we must depend all the more on maneuvering. But in many instances such a course is impracticable. Circumstances may arise with a corps or an army that in decisive moments make a frontal attack imperative. In such cases the first line must be followed by relatively strong reserves, to make up the huge losses, and this in itself will result in less front extension and greater depth.

The defense, on the contrary, needs fewer reserves, and may therefore occupy a more extended front. It should be well understood that defense begins only when the enemy's attack assumes a definite direction, and that with greatly extended lines it is impossible to maneuver (that is, to change front or shift troops about). What formations are best suited to satisfy the requirements of both the attack and the defense will be considered in detail later on.

As regards the case in hand, it need only be stated that, *for a division taking the offensive, whose artillery prepares the attack, an extension of about a mile is the maximum, if we would provide the attack with sufficient power through competent reserves.* It is not only almost impracticable to lead an entire force when extended beyond that limit, but it will be impossible to gain sufficient concentration in order to develop the necessary energy at decisive points.

A deployment beyond these bounds does not appear suited to carry through an action the extent of which cannot be seen and which as yet only permits maneuvering.

The first condition, in order to maneuver, is that the mass of troops be divided into organized and connected subdivisions. Subordinate commanders are then independently given their separate tasks, while the commander-in-chief sees that the parts co-operate for the common end in view.

Let us now turn to the situation before us. The advance against the position southwest of Trautenau partially occupied by the enemy bore the nature of a maneuver. But whether a maneuver shall be resorted to, always depends on circumstances. In peace exercises, it should be remembered, we are generally misled into maneuvering, by reason of the fact that there the most effectual means of leading (moral effect) finds no occasion for employment; in practice, however, the thing that is always sought in the first line is the decision of arms.

It was noticed that the enemy was in the act of approaching from the direction of Königinhof; it was therefore probable that the road to that town would also be his line of retreat. After the division commander had decided not to give his opponent time to firmly establish himself at Trautenau, he had the choice of two moves: first, to advance with his main body against the line formed by the Kriblitz ravine; second, to cover himself against this line, and, reaching out further with the rest of his troops, menace the line of retreat. In the first case he must proceed to a direct attack on the difficult position behind the Kriblitz line. But the terrain limited this attack to the space between the Aupa and the heights east of Kriblitz (554), nearly a mile in length, and the division was sufficiently strong to carry through the attack with vigor, and

in case of a repulse there would be nothing to fear considering its own retreat.

In the second case, on the contrary, the extension must be very great. Sufficient force was not available to make an energetic frontal attack and to employ any surplus in flank movements. If the division extended too far and attempted to act with its left wing against the line of retreat, it would run the risk of being dispersed by an attack against its own center, or losing connection with the other division if the attack should be directed against its right wing. But if this movement did succeed, it would certainly be the quickest way of accomplishing the end in view—the capture of Trauterau.

In spite of these considerations, the division commander nevertheless chose to maneuver, and he can be justified in his choice only in so far as he considered the hostile force inferior. If he had not been so convinced, prudence would have demanded the frontal attack on the Kriblitz line.

The danger incident to this maneuvering might certainly have been lessened if, instead of putting the 4 battalions of the Third brigade in the center, he had employed there the Fourth brigade, 6 battalions strong. *But in this connection the fact must not be overlooked, that with larger bodies the direction of attack is determined for the most part by the direction of approach.*

Had Lieutenant-General A——— awaited the coming up of the Fourth brigade to utilize it in the center, precious time would have been lost; had he tried to avoid this, and started out at once south of the ridge with the Third brigade, which was on the spot, as advanced left wing, then the enemy would be likely to evacuate Trauterau sooner, and the chances of damaging him during retreat would be less.

But by allowing the Third brigade to set out at first toward the Kriblitz ravine, he could hope by this less dangerous disposition to retain the enemy in his position, and then the interposition of the left wing would have a more decisive effect. These dispositions gave him this further advantage, that if the Fourth brigade followed in the left rear as flank echelon, its 6 battalions were for the time being available as a reserve. Should new columns of the enemy be observed, or should the enemy be found stronger than at first supposed, the

movement need not be pursued further and the division could concentrate much easier on its threatened center than if from the start the left wing had been far advanced and come in contact with the enemy.

When the enemy withdrew in consequence of the flank movement, the general did not hesitate a moment about advancing the Fourth brigade, which had been considered as reserve. At least the attempt to damage the opponent must be made during his flank march. Under these conditions, however, the entire division would have got out of hand if the Third brigade had not promptly received the order to assemble and remain on the heights south of Trautenau after obtaining possession of them. Thus, at any rate, a new reserve would soon be created.

As the enemy withdrew from the flanking movement in time, the attempt of the Fourth brigade only resulted in bringing him to a stand before Neu-Rognitz. Lieutenant-General A—— did not continue the action, because he considered he had carried out the intentions of the commanding general, as far as they were known to him, and he did not know whether the bringing on of a more extensive engagement, which would have taken the corps out of the direction assigned it, was in accord with the intentions of the commanding general, who was expected to arrive at any moment.

He therefore preferred, first of all, to put his force in such shape that it would be ready for any employment. The several parts of the division were brought closer together, so that it occupied a front of a little over a mile.

This is one of the most essential points for a leader's consideration. We know from experience in action, that when an important object has been attained, there is either a reckless, impetuous rush ahead, or a sort of relaxation in which every one remains on the spot where he happens to be, and, excited over what has just happened, forgets to think of what remains to be done.

It generally happens to be the first-mentioned impulse that a leader has to curb, as was the case with the two leading battalions of the Fourth brigade; yet, on the other hand, no leader should let himself become infected with the spirit of relaxation—he must give the impulse for rapid assembling,

he cannot foresee what tasks may lie before him, and at all events his troops must be so disposed that they will be ready for any contingency.

THE DIVISION COMMANDER'S MANAGEMENT OF THE ENGAGEMENT.

As shown above, for nearly three hours the division commander had comparatively few dispositions to make, but these were of great importance. He had scrupulously refrained from interfering with any details; his orders invariably went to the brigades, the commander of the detachment on the Liebau highway, the commander of the division cavalry regiment, and the commander of the artillery regiment, and concerned only what affected these leaders and the entire force under them. Their execution was left absolutely to the commanders concerned, and only in one case was an intended movement checked, and an already initiated movement in another case. This was when Major-General B—— desired to occupy the south edge of the long straggling woods so as to protect the division (Lieutenant-General A—— having meanwhile resolved to assume the offensive) and, later, when the Fourth brigade advanced beyond Alt-Rognitz, and the division commander, on arriving there, found that the situation no longer demanded a continuation of the action.

By such a course alone is it possible to maintain supervision over the whole and at the same time allow the individual commanders that independence which is so necessary to correct leading. *In war, however, such conduct meets with great difficulties.*

First of all, we must remember that interest is involuntarily attracted by events close at hand; what takes place right under our eyes is of greatest moment. Furthermore, the commander-in-chief is anxious to assist such of his troops as are in action and in danger, by his own advice and his own deed; he would like to see even the smallest divisions of his troops act just as though he himself were leading them. This temptation is often very strong, and few there are who can resist it. *One should never let himself yield to it.*

But although the division commander gave relatively few orders for over two hours, yet the orders he did give intimately

concerned the situation of the whole army corps, and were not confined alone to what was actually in sight. In order to survey a general situation, we must throw aside all useless details. The higher the leader, the more important for the whole is every decision he is obliged to make. Movements and evolutions of large masses of troops require considerable time, and when once started, it is with great difficulty that their direction is turned—in fact, it is impossible when contact with the enemy has been established.

So weighty are these decisions and consequent dispositions of the leader, that are conceived in time of action, that they claim all his mental faculties; from him alone can they emanate, and in them his duty lies. But if he allows himself to dwell upon details, he dissipates his energies and cannot focus them on his work.

Moreover, as a rule, such interference is seldom beneficial, for the plans of subordinate commanders are thereby crossed. Every commander has the right to solve his problems according to his own ideas, so long as he does not commit a manifest error, and he may proceed to do so in various ways. Every one chooses that which comports most nearly with his character and training. He has been placed in the position he holds, in the confidence that he will fulfill the duties pertaining to it; if he does not, then he should be removed. *But it is the duty of the leader to give the necessary orders to his subordinates in an unmistakable manner and to watch their execution, and interference should be made only when it is clear that any dispositions are endangering the end in view.*

For example, a regimental commander is commissioned to lead his regiment, and not a battalion or company. If he should suddenly appear at the head of that company which has first touched the enemy, he may forsooth perform brilliant deeds, but we can rest assured that he will soon be ignorant of what has become of the other parts of his regiment, which, as such, have slipped completely out of his hand. And to a division commander it is of less concern what may have become of a company, than that a regiment be conducted, as a manageable whole, in accordance with his intentions.

In decisive moments, on the other hand, it is different. Here the time comes to incite the troops to their utmost efforts. So when the final dispositions for the guidance of the whole have been made, the commander is free to hurry to his most advanced lines, where danger must be met, and, as a shining example, carry all along with him. Such supreme moments chance most frequently with the leader in front of his platoon, or the chief of a company. The higher we ascend, the less frequent they become, and only very exceptional situations should prompt a commanding general to such action. In real work the tasks of each leader are not similar. With the commander of a large force they are chiefly these: *he makes his plans with due regard to general conditions; he issues orders to his subordinates in accordance therewith; he then follows the execution of these orders, interfering only when his plans have been violated or not attained.*

This sounds very simple; but in practice, as has been remarked, it is quite difficult. On account of the diversity of situations that we meet in actual war, theory can give us only general suggestions, but no rules; and the training in peace exercises is efficient only when the utmost attention is paid to theory, although the necessity for this may be not at all apparent at the time, since, from the very nature of man and events, a commander is more concerned about the deportment of his troops during a peace maneuver than about his own training for action. Many here are more influenced by what the critique is likely to bring forth than by what the enemy might do, and many a false movement is righted only by the leader placing himself in the skirmish fire. Those charged with the conduct of maneuvers can hardly give too much attention in this direction. It would certainly be a benefit if commanders of regiments and brigades would start leading their troops from farther to the rear during peace exercises, as must be done in war when an enemy is in front. By so doing self-restraint would be decidedly promoted among those commanders who must often be called upon to act on their own responsibility in the field. Infantry Drill Regulations for peace exercises dwell with emphasis on the choice of position, and in the case of subordinate commanders even prescribe how one should stand when giving orders. In peace,

mounted officers are occasionally required to dismount, at mid and short distances, so they may learn to appreciate the difficulties of command and how to overcome them, and also to familiarize their men with seeing them afoot when under heavy fire.

THE DIVISION COMMANDER'S CHOICE OF POSITION.

The choice of spot from which to direct troops is of especial value to every commander. Here too in war the governing conditions differ for the various degrees of leadership. The division commander directing an engagement is guided by other considerations than his subordinate brigade commander, who leads his regiments to the attack.

By wisely choosing his position a leader is enabled effectively to resist the injurious temptation to meddle with details. For this reason it is desirable that the commander should not be too near the first line, but yet at a point where he can overlook it, as well as the enemy; but in doing this he should never lose control of his reserves.

Accordingly, when Lieutenant-General A—— had made the necessary dispositions at Parschnitz, he went forward up to his most advanced lines, in order to obtain *personally* an idea of the terrain and such movements of the enemy *as could be seen*. At the same time he came up with troops that had already been observing the opponent, and he received from their commanders explanations relative to points upon which reports hitherto had left him in doubt. We must insist that no matter how good any report may be, it cannot orient a commander as well as his own personal observation, and the maneuvering of large masses of troops will afford all the time needed for that purpose.

To effect this reconnaissance the division commander was not obliged to ride around very much. By going to the central peak on the wooded ridge (Hill 504), which was, moreover, the easiest to reach and near which Major-General B—— was stationed, he hit upon the most favorable point for his survey. Upon the opinions he formed there he directed the next movements. These led the troops forward into the country divided by the Kriblitz ridge. He accompanied

this advance, for by so doing he could best observe the separated parts of the division until he could reach Hill 531, a point that for the time being afforded him a quite sufficient outlook.

From the latter hill he could see into the valley of the Aupa and witness the movements of both the Third and Fourth brigades. *So he was able to supervise the carrying out of the movements ordered, to watch the enemy as far as the terrain would permit, and was posted where his own troops could easily find him.*

The headquarters flag should be placed where it cannot be seen by the enemy.

In observing the opponent the following were the only points that were of importance: Is he advancing with an increased force? Is he trying to hold his position? or, Is he withdrawing? The details of his movements, it is true, were of some importance, but, as a rule, only for the foremost line. There was no necessity to ascertain whether new columns of the enemy were approaching; such information is rarely obtainable at early stages of the action, although, considering the location of the hostile line of retreat in this case, it might have been obtained had the attention of the division cavalry been directed to it.

The great distance from which an engagement begins makes it difficult to find a position which is both near enough to observe the enemy continuously, and at the same time will allow us to keep the reserves in view. Nevertheless these are two conditions that the leader should never disregard; the care for the one urges him forward, while the other holds him back toward the rear.

However, *it is impossible to properly conduct an action unless the leader is fully informed with reference to the chief incidents in the visible movements of the enemy.* Such a question naturally arises more frequently with the leader of a division than with the leader of an army. The greater the mass to be moved, the more time is there for reflection. Such reports as are received come only from different parts of the battle-field, where the advance of a few hostile battalions is taken for a general attack by the opponent; and, as a rule, reports as to what has been observed of

the enemy by those engaged in front are received only during the initiation of a combat—if any come later, they are requests for a support. Consequently *the division commander should personally oversee the most advanced line*. And therefore, when Lieutenant-General A—— could no longer observe the action from Hill 531, he immediately went to Alt-Rognitz, and even into the first line of his troops, in order to obtain reliable information concerning the terrain and the whereabouts of the enemy.

When a leader pays as close attention as this to the movements of the enemy, it follows as a matter of course that *he need not pay especial attention to his own fighting line*.

The continued observation of the reserves, however, is not so easy. We might assume that discipline would keep the latter fully subject to the will of the commander-in-chief. Yet there is a more dangerous enemy than the absence of discipline, which any efficient commander is able to forestall—and that is misunderstanding and accident. For the transmission of an order three persons are responsible: first, the commander who issues the order—he may not express himself distinctly, may omit something that to him appears self-evident, or may give a wrong name; second, the bearer, who may not hear correctly or may misunderstand the order, or, anxious to ride away, may impress it upon his mind for the moment, but after he has galloped along for a few minutes the words may assume a different shape as he endeavors to recall them, or, even if he has retained their import, he may express them in a manner peculiar to himself, and so change the sense of the whole; and finally, the person to whom the order is addressed, who may misunderstand or, not fully comprehend it. Besides this, the transmission itself requires time, and conditions may in the meanwhile have changed. Field Service Regulations prescribe that whenever a verbal message is given, the bearer of the same should repeat it.

At the battle of Ligny, for example, when the reserves of the First and Second Prussian army corps were exhausted, the Third corps was directed to send 2 infantry brigades through Sombreff and *support* the center. The corps sent only 1 brigade (the Twelfth), and with orders to take post on the other side of Sombreff; while the brigade claims to

have received orders to advance via Sombreff and take post at that village in order *to maintain communication with the Second corps.* (4 p. m.) If the 2 brigades of the Third corps had reached the designated position, the French would probably have been unable to break through the lines; and as it was, however, all that was available to oppose the assault was cavalry.

Another example from the same period is no less interesting. On the 18th of June, 1815, Lieutenant-General von Thielemann found himself unable to initiate the march ordered, from Wavre upon Couture, on account of obstructed roads; he accordingly resolved to deploy his corps on the heights behind Wavre. To this end the Ninth brigade, which was still south of the creek, was directed, after crossing it, to occupy Wavre with 2 battalions, forming a reserve on the highway with the remainder. When later this reserve was needed, it was not on hand. The report of the Third army corps refers to this as follows:

"After General von Borck¹ had passed through the city, he was misled by a number of minor accidents to march with the rest of his brigade upon Couture, under the impression that the corps had in the meantime gone there and that he must join its rear in accordance with a former order. In this way the corps was deprived of 6 battalions, 1 battery, and 2 squadrons, in a manner for which no one could account; the line of retreat led directly through the center of the position, and an officer sent from it was expressly told that the general might march a short way down the road and post himself in reserve. It was not discovered until late that a mistake must have occurred in posting the brigade; but it was never imagined that it had gone to Couture, and so no one was sent there to bring it back."

On the other hand, the report of the brigade explains this "number of minor accidents" as follows:

"Toward noon information was received that the enemy was forcing back the Second army corps upon Wavre, and that it would retreat through the defile, covered by the Ninth

¹Commanding the Ninth brigade.

brigade, which was in front of it. The battalions were posted accordingly.

"When the rear guard of the Second corps was nearly abreast of the Ninth brigade, the written order was received¹ directing that it march to Couture via St. Lambert, and that it leave 2 battalions and 1 squadron of the Ninth brigade to occupy Wavre and defend the crossing of the Dyle.

"The rest of the troops had hardly been directed to take their departure, and they were just in motion, when a new order was received, which directed the covering of the left flank of the rear guard of the Second corps until its retirement was completed.

"The necessary dispositions were made. The 6 battalions retreated on the left side of the city simultaneously with the retreat of the Second corps, so that the corps would not obstruct the defile.

"After the troops of the Ninth brigade had reached the Brussels road on the bend around the city, and had taken post there, the order to continue the march on the Brussels road arrived; the order previously received to go to Couture was accordingly carried out, and the brigade arrived at that town late in the evening."

In both cases we notice a complete disappearance of the reserves, the commander not having had them immediately under his eye, or at least not having been able to control them. This is a point that a leader should always keep in view when choosing his position.

In the case before us Lieutenant-General A—— changed his position but once in an hour and a half after the fight began.

In spite of our best efforts, a position cannot always be found from which the entire fighting line can be observed. In such case the commander should be where he can at least overlook the most important part of the field of action, despatching to other parts reliable officers who can see for him and keep him oriented. It is also desirable, when circumstances will permit, that a position be selected from which communication with the next higher authority may be easily established.

¹Probably from headquarters of the Third army corps.

THE DIVISION COMMANDER'S MODE OF ISSUING ORDERS AND SEEING TO THEIR EXECUTION.

We have already discussed the issuing of an order. Seeing to its execution, however, is quite another thing.

Most important of all in an order is lucidity; the clearer it is, the more remote is the possibility of a misunderstanding. Ever remember that it is no easy matter to issue an order; it is an art that must be acquired and practiced.

The next thing is to obviate misapprehension and accident, to the best of our ability. In this the written order has the advantage, but in battle its use is only practicable with large masses, as in the direction of an army corps from general headquarters—in short, only between superior commanders. But as the distance between commander and subordinate is shortened, the more will the former become personally involved in the action, and the more quickly must his commands reach their destination; and in general this can only be done by a verbal order.

It is a good practice to inclose all written orders in envelopes. Carried in the hand or in the breast-pocket, pencil writing is apt to become illegible. The message card is generally used by headquarters in the field in preparing written orders. Where official paper or message cards are not at hand, a field postal card, a leaf from a memorandum-book, etc., will serve the purpose.

If orders are of special importance, and the troops for whom they are intended are at so great a distance that the superior commander cannot supervise their execution by personal observation, it is well to send a second horseman with the bearer. Further, if the country which the dispatch-carrier must traverse is made insecure by hostile patrols, a second or third copy should be sent, if practicable, on different routes. In the case of greater distances and at night, officers, accompanied by infantrymen in wagons, may be advantageously employed.

In case of verbal transmission by officers, mounted messengers, orderlies, and mounted men or cyclists, the carriers should always repeat the message in a loud voice before riding off.

The surveillance of the execution of an order is not difficult so long as troops are under the commander's eye. The situation changes when this is not the case. We can never be sure that a body of troops in action will send timely and sufficient reports, no matter how positively this may have been enjoined; the progress of the fight usually absorbs their entire attention; the superior commander is seldom thought of, so long as he is not on the spot. Experience having demonstrated this to be the rule, we must do our utmost to obviate the evil consequences which may arise from it.

Officers should be sent to ascertain if directed movements have been commenced; if distances are great, they should be permanently attached to the different detachments for that purpose, and furnished a few mounted orderlies.

For example, on July 3, 1866, strong reconnaissances by the Second Army toward the Aupa had been ordered by the Prussians, before reports of the presence of large hostile forces on the Bistritz were received. On the preceding day a general staff officer had accordingly been dispatched from Miletin to Königinhof by the general headquarters to accompany the reconnaissance.

When, on the morning of the 3d, orders were received at the headquarters of the Second Army to join at once with all available forces the expected engagement of the First Army on the right bank of the Elbe, the following officers were despatched from the commander of the Second Army's staff: one to each of the four corps of the Second Army; upon leaving Königinhof a general staff officer to the headquarters of the commander-in-chief, to report that the Second Army was in motion pursuant to orders; also a general staff officer to the nearest division of the First Army (Fransecky's), as the right of the Second Army must seek to establish connection there.

Upon arriving at the heights of Choteboreck, whence the approach of the Guard corps and the Fifth corps could be seen, an officer was sent to the First, and another to the Sixth corps, to satisfy themselves that these corps were actually in motion, and to ascertain where their heads were located.

Just after they had ridden away, the Sixth corps was seen opening the action to the left front.

During the campaign of 1870-71 also, the commander-in-chief, as well as the commanders of the several corps, greatly appreciated the value of obtaining in this manner timely and full information regarding events at places where they themselves could not be present.

Thus, on August 16, three general staff officers happened to be at Vionville and Mars-la-Tour, who, in view of the possibility of an encounter, had been sent on the afternoon of the 15th from Herny to the advancing Third corps. In the battle of Gravelotte and St. Privat two were attached by the same headquarters to the Second Army; at Beaumont some to the Third, as well as to the Meuse Army; and again at Sedan to the Meuse Army by the commander-in-chief, and also to the Fifth army corps, which was turning the other wing. Even two officers from the far-distant headquarters of the Third Army appeared on the battle-field at Gravelotte during the afternoon, and returned thither at night, after the battle was ended.

All these general staff officers continually sent reports during the progress of the action, and only returned when the battle was over and they had informed themselves fully regarding the positions of the various subdivisions and the intentions of their commanders for the following day.

The detachments made for the transmission of orders and information relative to the course of the battle were entirely independent from these general staff officers.

MESSAGES.

What has been said concerning the means of conveying orders applies equally to that of messages.

Field Service Regulations prescribe that all messages sent by any headquarters or by any officer shall each day be numbered in a separate series for each person who shall receive them. When this is done, a recipient is able to determine whether all messages have reached him, or some have gone astray.

This was not done in the messages sent by the reconnoitering detachment on June 26, but that no mischief resulted is no reason for disregarding such measures of precaution.

As a general thing, advance forces cannot report too much, while at the same time they should not fail to use dis-

crimination in doing so. In the face of the enemy the service of spies, as a rule, proves ineffective; it is therefore the duty of the troops to furnish higher headquarters with such knowledge concerning the enemy as is indispensable, and if necessary concerning their own movements, and to do this in the most exhaustive manner.

We must therefore consider it an error when the division failed to advise corps headquarters of the arrival of the Guard at Braunau on June 26, as reported by its reconnoitering detachment.

As regards Lieutenant-General A—— the question that immediately concerned him was, "What message shall I send to my commanding general, who is not also on the spot?" We have seen that he sent two communications—the first relative to the approach of the enemy and his decision to resist him on the right bank of the Aupa, and the second conveying information that Trautenau had been seized.

Although these messages, as they were gotten up, contained sufficient information relative to the situation, *the division, nevertheless, did too little in this direction.*

Just consider for a moment the position of the commanding general. How anxiously must he have awaited further advice after receipt of word that half of his corps was facing the enemy! As soon as he should arrive on the First division's battle-ground, the conducting of the action would devolve upon himself; he could therefore not be advised too soon regarding the engagement. Moreover, if the Second division should be thrown back into the mountain passes before the First was enabled to leave them, he would be obliged at an early moment to take different measures than if it had gained ground. In the latter case, cavalry and artillery reinforcements could be quickly brought up and sent out in advance of the column, which was still on the march; the first case, however, would forbid this.

In any event, it would have been a wise move on the part of the commanding general if he himself had hastened to the front or sent forward a general staff officer as soon as he heard the thunder of the cannon.

In any ordinary situation, such as this was, it is deemed absolutely necessary to furnish the superior commander not

on the spot with reports of the state of affairs at regular intervals, perhaps every half-hour. Well-mounted aids may most advantageously be used for this purpose; but their number hardly suffices for the demand. The division cavalry is weakened too much by the detachment of officers, and on such occasions it is advisable to establish relay lines, which are mobile and can follow the changes in position of the commander. The First cavalry brigade could have furnished a platoon for this purpose on June 27. Wheelmen, too, could have been profitably used on the macadamized highway.

The signal corps is unable to help out in such contingencies, as it requires from 20 to 30 minutes to lay a mile of telegraph. Flag signals, as used by the Navy, are never visible for more than a mile; and besides, they require cavalymen trained in signaling, who are not available in most cases.

THE GENERAL STAFF OFFICER.

The one first to come to the assistance of the division commander, and the one who should always be at his side, is the general staff officer. He should relieve his general of all details in issuing orders. His special concern in battle is to aid his commander in acquiring a thorough knowledge of the situation, so that he may make judicious dispositions. This he cannot do unless he absents himself at times from his commander, who cannot be everywhere and who should change his station as little as possible; yet he should never be away more frequently, or remain away longer, than seems to be urgently necessary, and such absence should never be optional. *The place of the general staff officer is at the side of his general, whom he should never leave except by his order or with his permission.*

Occasions for his absence arise often enough. Even when the fighting line is not unusually extended, the commander, from his station in the rear, can, as a rule, observe only the general trend of events. He sees where the action comes to a standstill, and where it advances or retires, yet often he is at a loss to know why in one place progress is made and in another the troops give way. If he tried to go everywhere, he would soon lose control of the whole.

Although the terrane may hide the movements of part of his own or the enemy's forces, or reports that he receives may not be explicit enough to enable him to form a clear idea, yet it will not be wise for him to leave his position, because he must keep the bulk of his troops under his eye.

Moreover, when a division is advancing upon the enemy, there is not time enough for any one man to survey the large terrane it will cover. Troops, too, are awaiting their orders. Yet no proper disposition can be made without at least a general survey of the ground.

In all such cases a leader of a large force needs someone who can go and see for him, and on whose judgment he can depend. This trust is the general staff officer's. He can fill his position only when he has been specially trained for such duty. And above all, he should, *of his own volition, be ever intent* on lessening his commander's work as best he can.

The general staff officer must not only be able to comprehend the part that his troops are to play in the general situation, but also to correctly judge the several periods the action necessitates, and the character of the terrane; all of which demands the most thorough education. The greatest difficulty he encounters lies in the fact that in order to judge correctly he must always retain a general grasp of the entire situation, whereas his duties frequently carry him to places from which he can see only a part. Therefore he should not fail to inform himself fully upon his return, of all that has happened during his absence.

As regards the example before us, at 8:50, while the division commander was engaged in issuing his orders near Parschnitz, the general staff officer was instructed to reconnoiter the movements of the approaching opponents, and also the country on the right bank of the Aupa, with a view to an attack by the division.

At 9:32 (42 minutes later) he returned to his commander on Hill 504 (about a mile south of the Parschnitz church) after he had meanwhile ridden to the most advanced hussars scouting toward Kriblitz. When it became impossible to observe any longer from this hill what was happening in front of the advancing Fourth brigade, at about 10 o'clock he was sent out to the brigade. He returned with his report at 10:25,

only to leave again at 11:20 to reconnoiter the ground before the Third brigade with a view to the possible continuation of the advance, a region that the commanding general could not see from his new position. He had not yet returned when the division commander rode away.

In this period of $2\frac{1}{2}$ hours (from 8:50 to 11:20) Major X——— was present with the division staff 83 minutes and absent 67 minutes, during which time he had ridden about 7 miles. His absence had been necessary, for in each case a thoroughly trained officer was required; and as the division had only one general staff officer who could be so employed, it was certainly very difficult for him to keep himself informed continually of the general course of the action.

Experience teaches that it is very desirable to attach to a division staff aids who have had instruction at the war academy and in practice rides. These can very well take the place of the general staff officer in making reconnaissances. It is certainly not wise for a division commander frequently to send his general staff officer away during an engagement, unless it cannot be prevented. The latter is familiar with his plans, can assist him in directing the action, and can take his place if any accident should happen to him, in so far as it is necessary to advise his successor regarding the situation. The general staff officer must make out the report of the engagement, which he can do only provided he has been constantly near the one who directs the action. Furthermore, he must see to his commander's recuperation, and keep away all things that would disturb him while seeking rest. Messages are constantly arriving during an action, and if in writing, they must be opened and read in perfect composure. Before he can read aloud a message that has just been brought in, he frequently has to first sort over a number of others that have accumulated, as many messages are unimportant and, if read without examination, draw the commander's attention away from the real course of the engagement.

It is also the duty of the general staff officer to keep away all persons who have no business at headquarters, but crowd around the commander, express their opinions in a loud voice, and even presume to give advice, or otherwise create disturbance in the staff.

Under his direction the senior aid makes the details of orderly officers and mounted messages, and in action observes that order is maintained in the subordinate staff and among the led horses.

Even when the division is not engaged his tasks are just as comprehensive.

We can here study only one period of his activity, from the time he was first sent away from Parschnitz at 8:50 until he returned to the division commander on Hill 504 at 9:32.

From the division commander's message to Colonel D——, the general staff officer knew, when he left, that the division intended to cross the Aupa near Parschnitz and advance on the right bank to the attack of the enemy who was reported to be approaching; he also knew that in the meantime Colonel D——'s detachment and the First cavalry brigade must cover the Liebau highway. His orders were to reconnoiter the enemy and the terrain, with a view to an attack by the division. To accomplish this he had relatively little time, for it was evident that the attack must commence as soon as the troops had crossed the stream. The most exact and exhaustive reconnaissance is useless unless its results become known at the right time.

Under these conditions it was necessary to reach a point as far in front as possible and from which a good view could be obtained. Such a point was only to be found south of the wooded mountain ridge. Then the officer must communicate with the commanders farthest to the front, to learn what they had observed in the meantime. Major-General B—— had already ridden forward to Hill 531 (nearly a mile north of Alt-Rognitz). There the general staff officer found him, and the two watched the hostile movements for a short while; then he hurried along the Kriblitz ridge to the troop of the Fourth squadron, scouting in front of Kriblitz, whose leader gave him some details and pointed out the spot from which he could best continue his observations.

From what the hussar officer told him, he was convinced that the enemy was not very strong, and that he was not endeavoring to advance beyond Trautenau, but was establishing himself there. At the same time he carefully examined the character of the Kriblitz line, and perceived that a frontal

attack against it presented greater difficulties than an advance south of it.

He then became anxious to go to the hussar regiment on the left wing, to learn in person what had been seen there. He also looked around to see whether a prisoner had not been taken during contact with some of the cavalry patrols, from whom he could learn what hostile troops were in front, of which hitherto no one had any idea.

Upon first contact with an enemy, it is especially necessary to ascertain whether information previously gathered concerning his composition is correct. To know this quickly is of the greatest value to the leader of an army.

It was found that no prisoners had been brought in, and there was no time to continue the reconnaissance. At any rate, its main object might be considered accomplished. Major X—— consequently hurried back to the division commander, whom he found at 9:32 on Hill 504. While absent 42 minutes the general staff officer had traveled nearly 4 miles, having stopped at times to make observations and at times to converse with others. When he returned, it was found that the report sent by Major-General B—— had given better information than he was able to bring. What he learned was consequently of value only as confirmation, and particularly with regard to the character of the terrain.

The general staff officer might possibly have been sent out sooner. Yet we must not forget that the division had only one general staff officer assigned to it, whose duties were of such a manifold nature that his strength must not be used up by what was immaterial or unnecessary.

For instance, had he gone forward to reconnoiter toward Alt-Rognitz during the halt at Parschnitz, and in the meantime the enemy was seen approaching from the west or in the valley from Raussnitz, he would not have been on hand at the important moment of the initiation of the engagement. Only when everything unnecessary has been avoided will his powers be equal to his task, if an emergency should demand them regardless of consequences.

His first duty on returning to the staff was to learn what had been reported of the enemy during his absence, and what dispositions had been made among his own troops; also where

the various subdivisions were located, and to assure himself that necessary details had not been overlooked in making the dispositions.

He could certainly not trouble his commander at that important moment with questions, and inquiries of other members of the staff could only furnish incomplete information. If, in view of this condition, his general does not of his own accord take the trouble to inform him, the general staff officer easily loses that complete survey so necessary for him.

Among the details needing attention are the providing of vehicles for the transport of wounded, arrangement of movements of trains and prisoners, sending reports to higher headquarters, and providing a guide familiar with the country.

This last may seem superfluous, but it certainly is not so. Even when the most minute maps are at hand, all the sections of a map cannot be carried in the saddle-bags, and the unexpected course of events may suddenly call for a certain section that was left behind, there having been no intimation that it would be needed until next day. It thus happened in one of the superior staffs at Königgrätz, which was well supplied with map material, that upon going on the battle-field not a single section of the proper ground could be found.

However, even when a complete map is at hand, errors are not impossible. With map in hand orientation can be lost during a rapid ride, where direction is often changed and attention distracted by passing events. Finally, with the best maps, mistakes with regard to distant points, such as church-steeple rising behind woods, are easily possible. The old saying, "A guide tied to a string is better than the finest map," is as pertinent to-day as ever, and it is well to charge an officer in every staff with continual observation of the country.

Another thing: Exercises on the map are not always conducted in a sufficiently thorough manner. In war the value of maps giving general surveys needs no further proof, but for map studies such surveys and such general information is not enough. The entire landscape should rather be mentally pictured, as has been frequently attempted in the sketch before us. When we assume we have come to a certain place on the map, we should stop and ask ourselves what picture the landscape would present, according to the map. In this

manner preliminary exercises will become highly beneficial in training us to make proper dispositions later on when we are on the ground itself.

THE THIRD INFANTRY BRIGADE FROM 8:40 TO 11:30.

We left Major-General B—— at 7:40, as he returned to the main body of his detachment after having reconnoitered the terrain in his front. His detachment consisted of

- 3 battalions, 2d infantry regiment,
- 2½ squadrons of hussars,
- 3d horse battery,
- Engineer company,
- 1 ambulance company section.

These troops were on Hill 290, south of Parschnitz, their most advanced subdivision having moved up to the edge of the woods toward the south. They had stacked arms, removed packs, and rested, the cavalry and artillery dismounting.

The second battalion of the First regiment was at the southern edge of the woods (near Hill 504), with guns stacked also, but not with packs unslung. Its Fifth company, sent forward to the Raussnitz road, had posted a platoon on Hill 531 in front, and established a non-commissioned officer's post in the direction of Raussnitz.

The Second troop of the Fourth squadron had advanced toward Kriblitz, and the Third troop of the Third squadron toward the center of Alt-Rognitz. Shortly a message from the former brought the information that it could not get beyond the ravine, as a larger body of hostile dragoons was halted near the Hopfen Mountain.

As this message contained no new information, it was not forwarded to higher headquarters, the presence of hostile dragoons at Trautenau having already been learned while at Schömburg.

To save alarming the troops, the Second troop of the Fourth squadron was directed to continue watching the enemy's cavalry.

Nothing further happened until 8:28, when a non-commissioned officer of hussars, accompanied by a trooper of the Third troop of the Third squadron, arrived and reported that a hostile column of all arms was on the highway advancing

on Trautenau, and that at 8:10 its head was still about two-thirds of a mile south of Hohenbruck.

Major-General B—— did not wish to send such important information to the division commander without further investigation, but, as it would take too much time to satisfy himself personally of its correctness, he had to be content with closely questioning the non-commissioned officer. According to the statement of the latter, the Third troop of the Third squadron had gone forward to the nearest village (Alt-Rognitz) and halted north of it. Shortly afterwards great clouds of dust were seen in a village about a mile away (Neu-Rognitz) through which the highway passed. The troop had accordingly gone through the former village and taken up a covered position farther to the front, while the officer in command of the troop, together with the non-commissioned officer himself, went up to a small wooded hill (527) not far from the highway southwest of Alt-Rognitz. From that point the enemy's advance could be watched from a distance (in the words of the non-commissioned officer) of "not over a thousand paces." First a battalion in white coats came out of the village, followed by a battery. Then more clouds of dust were seen, when suddenly a squadron of uhlans dashed from the side of the village against the hussars, forcing the Third troop to retreat, and they had not yet come to a halt when the officer directed him to ride on in advance as fast as he could to Major-General B——.

With this statement, there could be no further doubt as to the correctness of the report.

As the horses of both hussars were somewhat exhausted on account of their rapid ride, the general instructed an officer of the regiment to take the message to the division commander, and himself repaired, without having the troops fall in, to the infantry platoon posted in front, where a hussar sent from the Second troop of the Fourth squadron met him and handed him the following message: "A hostile column is marching against Trautenau on the highway from Königinhof. At 8:30 its head reached Hohenbruck."

From the hill where the troop was stationed (531), by looking between some peaks with a good glass, the point where the houses of Hohenbruck touched the highway could

be seen; moving infantry was plainly visible there, the clouds of dust raised by their march extending from a point north of the village into the woods in front of Neu-Rognitz. The troops of hussars sent in advance were also visible, in front of both Kriblitz and Alt-Rognitz.

To ascertain more closely the strength of the enemy more cavalry was needed, and at the same time the general thought it best, in order to secure the division, to occupy the southern edge of the long stretch of woods behind which the main body of the detachment was located. He therefore despatched his aid at 8:38 to bring up the hussar regiment, and to direct the rest of his troops to come up to the southern edge of the woods. At the same time the Second battalion of the First regiment was directed to take up a covered position as support, north of the hill (531) lying in front.

Report of his intention to prepare to occupy the southern edge of the woods was sent to the division commander.

Meanwhile the general continued his observations.

At 8:50 the hussar regiment, now only $2\frac{1}{2}$ squadrons strong, came up to him. Its commander, who had ridden on ahead, was advised of the situation and instructed to advance between Kriblitz and Alt-Rognitz, in the direction of Hohenbruck, and ascertain the strength of the enemy.

The Second infantry regiment began to form on the southern edge of the woods, the Third battalion in column of platoons on its right wing, on its left the First and Second battalions, also in column of platoons, and covered in the woods, and the Third battery took station behind the Third battalion. The engineer company deployed into column of platoons¹ at the side of the Second battalion.

Soon afterward the Third troop of the Third squadron sent in the following written message:

3d Troop, 3d Squadron. Hill north of Alt-Rognitz,

(1st message.)

27, 6, '66, 8:54 a. m.

As yet only single baggage-wagons are passing through Neu-Rognitz. At 8:54 the rear of the enemy's column is only a few hundred paces from Hohenbruck. Hostile uhlans (apparently 4 squadrons) have halted behind the thickets east of the village.

¹Three platoons, of 71 men each.

Shortly after 9 o'clock a hostile battery was seen on the Hopfen Mountain; it opened fire on the troops in the valley toward Liebau. At the same time the brigade commander noticed the rear of the enemy's column entering Hohenbruck. The head of the hussar regiment had reached the open country between Kriblitz and Alt-Rognitz, when it was met by infantry fire from the thickets in front; it then turned toward the forest of Alt-Rognitz.

Major-General B—— returned to the main body, to arrange the details for posting it, and there, on Height 504, he met the division commander, and reported what had so far occurred. (9:15.) The latter divulged his plan of advancing on the right bank of the Aupa against the enemy's flank, and directed Major-General B—— to take up the march toward Kriblitz. (9:23.)

The orders that Major-General B—— accordingly gave were as follows:

To the battery commander: "The brigade will attack Kriblitz from the north of the projecting ridge. Prepare the attack from Hill 366. The cavalry you see over there toward Alt-Rognitz are our hussars. Hostile dragoons and uhlans are east of Hohenbruck."

To the commander of the Second infantry regiment, who had heard the order given the battery commander: "Have 1 battalion attack the northeastern corner of Kriblitz, and the Second battalion of the First regiment march along the heights in front abreast of it. You will follow in the direction of the northern part of Kriblitz also, with the 2 other battalions, as reserve and at my disposal. The Third battery will prepare the attack. A troop of hussars is watching the enemy in your front."

To the commander of the Second battalion, First regiment (up to whom he rode and delivered the order in person): "The brigade will attack Kriblitz, the battery preparing the attack. Make a right turn with your battalion, and connect on the right with the leading battalion of the Third infantry regiment, in the direction of the northeastern corner of Kriblitz. The Fourth brigade will advance on your left."

The engineer company and ambulance company were instructed to follow the Second regiment.

The Third battery at once sent scouts ahead to Hill 366 (east of Kriblitz) and the commander, riding ahead, directed the battery to follow in the valley in column of platoons¹ at a trot. When the infantry skirmishers came up, it took a covered position on the eastern slope of the hill, and at 9:35 suddenly opened fire on the hostile artillery on the Hopfen Mountain, at a distance of a little over a mile.

The commander of the Second infantry gave the new point of direction to the Third battalion, which was on the right wing, whereupon the battalion commander had the column of platoons change direction to the right toward Hill 366 and designated the Ninth and Eleventh companies as first line, which sent forward only thin skirmish lines, as no hostile infantry was visible. The two other companies, with the Tenth in echelon to the right, followed at 220 yards. The First and Second battalions followed the Third in column of platoons at a distance of 150 yards, the former on the right and the latter on the left.

The Second battalion of the First regiment, which had taken post south of Hill 531 with the Eighth company under cover and the others at a distance of 100 yards, had the column of platoons of each company wheel to the right and pushed its right wing (Sixth company) toward the Raussnitz-Kriblitz road, the rest of the battalion forming in two lines, echeloned to the left, skirmishers in front, and connecting with the Third battalion of the Second infantry. The commander sent the mounted riflemen to Hill 554 to watch the enemy.

At 9:40 the first line of the infantry was advancing in close order on each side of the battery. The rear of the brigade had left the woods near Hill 504. The heads of the Fourth brigade were coming into the open at the southern edge of the woods.

The hostile artillery had replied with only a few shots, and had then withdrawn, together with the infantry² and dragoons that had been stationed on the Hopfen Mountain.

The Second troop of the Fourth squadron, advancing through the northern end of Kriblitz, tried to gain informa-

¹Three platoons.

²Reconnoitered by the general staff officer of the division, and therefore not further reported by the Third infantry brigade.

tion as to the whereabouts of the enemy; they had to proceed with caution, however, as single dragoons still appeared behind the projecting hills, and it was not yet known whether Trautenau was occupied. At the same time skirmishers from the Third battalion of the Second infantry, having been reinforced during a short halt, were approaching the eastern edge of Kriblitz. The Sixth and Eighth companies of the First infantry had entered the thickets on the declivity east of the village, and received a lively skirmish fire out of its western section on the opposite slope. In the first excitement the deployed platoons (1 from each company) rushed down the ravine to the attack, followed by the two supports. Order among the latter was somewhat impaired on account of the difficult terrane, but they still formed a closed mass, upon which the skirmish fire of the enemy made such an impression that the leaders ordered them to lie down. The greater part of the skirmishers of both companies reached the bottom of the ravine, where they found they could move neither forward nor backward, and they sought cover in the sunken road and near-by buildings. Their supports, deployed in the edge of the woods, finally took up the fire, and were soon reinforced by the Seventh company.

The losses were not inconsiderable, and a dressing station was established behind the thicket, where, by order of the brigade commander, several medical officers from the Second regiment rendered assistance; it did not yet seem necessary to bring the ambulance company section into service.

Major-General B——— ordered the battalion commander to desist from a further advance, but to hold the hill east of Kriblitz. The brigade reserve (First and Second battalions of the Second infantry) was directed to follow the Third battalion, crossing the northern part of Kriblitz. The same direction of march was given the Third battery, as it was impracticable to go into action behind the Kriblitz hill (554) under the effective fire of the enemy.

After crossing the ravine, the Third battalion detached the Tenth company toward Trautenau as right flank cover, and with the others (the Eleventh leading) turned toward the thicket occupied by the enemy, in order to join in the action of the Second battalion of the First infantry. As this move-

ment was in full accord with his plans, the brigade commander allowed it to proceed, and repaired to the First and Second battalions of the Second infantry, whose leading companies were entering Kriblitz, after each battalion had deployed near Hill 366 in two lines in company columns. As he rode down the hill the brigade commander noticed that Colonel D——'s detachment, on the Liebau highway, was also moving toward Trautenau.

In Kriblitz the Second troop of the Fourth squadron reported that Trautenau had been evacuated, but that the bridges were obstructed by strong barricades. The general accordingly despatched the engineer company to Trautenau, with directions to clear the crossings over the Aupa, and occupy and reconnoiter the southern and western exits of the city, in connection with the Tenth company, which had already proceeded thither. The next moment (it was now after 10 o'clock) the division commander's order to seize Trautenau and the hill south of it, and to bring up Colonel D——'s detachment, was received.

The first had been done already, and as the aid who brought the order had yet to go to the First cavalry brigade, he was directed to give the necessary instructions at the same time to Colonel D——.

The enemy withdrew from the patch of woods on the approach of the Third battalion of the Second regiment, after a slight skirmish with only 2 platoons of the Eleventh company. On entering the woods it encountered parts of the Second battalion of the First regiment, which, when they saw the enemy was retreating, followed in pursuit. These two bodies were the more certain of becoming mixed up, as the Ninth and Twelfth companies were also entering the woods.

About that time Major-General B——, with the First and Second battalions of the Second regiment and the battery in rear, approached the deep ravine on the northeastern slope of the Hopfen Mountain. The troop of hussars, which was now reduced to a strength of 16 by reason of its having sent patrols beyond Trautenau, was scouting on the further side of the hills west of the Hopfen Mountain.

Colonel D——'s column at the same time suddenly halted in the valley, while the cavalry brigade trotted past it; this

delay was attributed to the obstruction of the Aupa crossing.

Major-General B—— then ordered the 2 battalions to cease their pursuit of the enemy, and to assemble near the main body of the brigade, south of the Hopfen Mountain. It required some time to execute the order, as portions of both battalions that had become mixed in the woods had followed the opponent beyond the woods before order was re-established.

The commander conducted the main body to Hill 504, southeast of Trautenau. On account of the sunken road in front, the battery was forced to make a detour, turning around along the western edge of the little woods of Kriblitz, in the direction of Trautenau, before making a junction again.

Before the hill was ascended hussars reported that hostile infantry was marching off on the highway, and that the last section had already reached Hohenbruck; also that a battalion and several squadrons were retreating through the western part of the village.

This message was forwarded to the division commander, with additional information to the effect that the brigade, holding the city, was assembling south of the Hopfen Mountain, for the purpose of pursuing the enemy.

At 10:30 the main body of the brigade began to arrive at Hill 504, whence the leading sections of the Fourth brigade were seen approaching Alt-Rognitz. The rest of the Second troop of the Fourth squadron reconnoitered the country up to the sunken road leading from that village to Hohenbruck. The Third battery, being necessitated to make a detour by reason of the difficult terrane, was not able to come up in time to fire upon the retreating enemy on the highway.

This was the situation when word was received from the hussar patrols that had advanced farther to the west, and shortly afterward from Colonel D—— also, that a column of all arms was approaching Trautenau along the upper Aupa, whose point was only $\frac{3}{4}$ of a mile from the city.

The news was extremely surprising. Nothing whatever was known of the presence of friendly bodies in that direction; therefore they could only be the enemy. Under these circumstances the brigade's situation was a disagreeable one, inasmuch as it would have to change front toward the west and south, and at the same time occupy the city and the hills.

However, before any dispositions were made, Major-General B——— rode forward in that direction to see for himself whether the report was correct. But before he reached his point of observation his mind was set at rest by a second message from Colonel D———, which stated that the approaching body belonged to a flank detachment of the First infantry division, and that his hussars had already established communication with its dragoons.

The general returned to his brigade, where, at 10:50, he was joined by one of the division commander's aids, who had brought him instructions to halt on the hills until further orders.

The battalions that had been deployed near the little woods at Kriblitz now began to arrive with the main body. Only the Tenth company was still in Trautenau. The Second battalion of the First infantry posted itself at the right of the Second regiment.

Soon afterward the head of Colonel D———'s detachment, coming through Trautenau, also approached the rendezvous, having moved off from the farm-buildings near the Liebau highway when the brigade reached Kriblitz. The 2 troops of the Fourth squadron that had pushed on ahead had cleared away the barricades on the bridges before the engineer company arrived. As the infantry did not advance on the highway, but to the south of it, the First cavalry brigade was able to trot forward on the latter and make use of a wooden bridge to the west of the main bridge.

At 11 o'clock the head of Colonel D———'s detachment had arrived near the Third infantry brigade and began to draw up on the right at the side of the Second regiment, which was formed in double platoon column. The cavalry brigade formed column of troops¹ alongside the highway leading to Arnau, and despatched a squadron to reconnoiter the road to that town.

At 11:09 the order arrived from the division commander, directing the Third infantry brigade to advance as far as the sunken road leading from Alt-Rognitz to Hohenbruck, maintaining its hold on the highway, and to occupy the hills south

¹In the German Army a troop is formed in two ranks.

of it. The brigade moved off by wings, the regiments abreast, the Third battalions in the first echelon, with the First battalion of field artillery to the right where the ground was better suited for its movement. Shortly afterward Major-General B—— saw the columns of the First division nearing Trautenau on the Liebau highway.

At 11:20 the corps commander came up with the brigade, to whom Major-General B—— reported what had taken place, also the object of the movements then in progress, and at the same time sent word of his arrival to Lieutenant-General A——.

At 11:30 the Third battalion of the First regiment, less the Eleventh company which was posted near Raussnitz, had occupied the portion of Hohenbruck near the highway with 2 companies (one deployed and the other in close order behind it). The Tenth company was on the eastern edge of the patch of woods situated to the east.

The Third battalion of the Second regiment, also only 3 companies strong, deployed 2 companies, making connection on the left, the first line stretching beyond the sunken road from Alt-Rognitz to Hohenbruck, the last company in rear as reserve. Both battalions had sent their mounted riflemen to Hill 527 (southeast of Hohenbruck) to observe the enemy near Neu-Rognitz.

Further to the rear at the bend of the defile toward the north were the other battalions, the First regiment on the right, the Second regiment on the left in double platoon column, the First battalion of field artillery on the right near the highway, while still to the right the leader of the Fourth squadron was endeavoring to assemble his force as quickly as he could by bringing up the Second troop and various patrols.

The corps commander gave permission for the Tenth company of the Second regiment, which was still in Trautenau, and also the company of engineers, to be withdrawn.

The cavalry brigade, in column of masses, occupied a covered position behind a slight elevation north of Hohenbruck.

These events with the Third infantry brigade permit of a more minute investigation.

Its 4 battalions (together with $2\frac{1}{2}$ squadrons of hussars, a battery, an engineer company, and an ambulance company section) which had been detached on the right bank of the Aupa, were charged with the security of the division camped in the valley of Parschnitz.

Its leader, a brigade commander, must make his dispositions in such a manner that the detachment could perform its task even if necessary to fight. Yet as the conditions would depend upon the movements of the enemy, it was impossible to tell in advance whether the fight must be carried on in the direction of Kriblitz or Raussnitz, or in both directions. All that Major-General B—— could therefore do was to hold the mass of his troops in readiness to strike the enemy wherever he might approach.

To do this, it was necessary to reconnoiter in the probable directions of the enemy's approach in such manner that he would be promptly discovered and sufficient time gained to deploy for action in a suitable position; at the same time, the position itself should be reconnoitered in advance.

General B——'s first disposition must be governed by these considerations.

It was at once clear to him that in case of an engagement the brigade must be deployed somewhere along the southern edge of the long stretch of woods in front. To facilitate arriving there at the right moment, and at the same time to reconnoiter, a battalion was pushed forward beyond the border of the woods, while a troop of hussars examined the country in front to the west, and another troop to the south.

Even under these conditions it was not a matter of indifference which battalion was brought forward for the performance of the service of security. For this task the Second battalion of the First regiment was designated. By this means the entire Second regiment was kept together under its commander, in pursuance of the maxim not to divide organizations any more than can be helped. For instance, had another battalion of the First regiment been already on the spot, it would have been proper to bring forward a battalion of the Second regiment instead; by this means the two regimental commanders, each with two of his battalions, would have remained with the main body.

It is difficult to dispense with subordinate commanders in the conduct of an action; they certainly are of material aid. When part of an organization is detached, its leader should remain with its greater part. Thus Colonel D—— was in command where at least 7 companies of his regiment were still united, and General B—— also had 4 battalions of his brigade in hand. On the other hand, if the battalions of a regiment are dispersed separately in different directions, there remains nothing for its commander to do but to watch as a spectator. But as he certainly does not relish this, he attaches himself to one of his battalions, which thereby acquires two commanders, and nothing is gained.

The principles here laid down should never be disregarded when detachments are made.

Another question might be, Why was Major-General B—— content with employing only 2 troops of hussars to reconnoiter the roads? It is the duty of the division cavalry regiment to perform all reconnaissances for the division, both before and during an engagement, and even at long distances if no other cavalry is present. Here there were $2\frac{1}{2}$ more squadrons at General B——'s disposal. The only answer is: A commander must never forget that many different purposes arise with the many changes in the situation, and there is no rule applicable to all cases. A commander should always see how he can accomplish the object before him with the least means. Now, had it not been known that hostile cavalry was in the vicinity, and had the terrain which was to be reconnoitered not been so great (from the Kriblitz valley to the valley of Raussnitz), Major-General B—— could have contented himself with sending only an officer and a few selected troopers in each direction.

The mistake is often made of sending forward the entire division cavalry regiment at once, even where a few intelligent and daring riders could obtain a better view and would not be so quickly discovered. Such procedure is the immediate ruination of the division cavalry, and sometimes occurs before the first contact has taken place, nor will it be on hand if suddenly needed to scout in another direction. It will seldom be the task of the division cavalry to enter an engagement with a view of piercing strong hostile cavalry and see-

ing what columns are marching behind it; it is too weak for this, although it may reinforce a cavalry division for such purpose. When with an infantry division, it is dependent upon itself, and must reconnoiter before, during, and after an engagement. How and when the cavalry of a division should take part in an action of the other arms depends on the inclinations and perceptions of its regimental and squadron commanders. Yet it must not be forgotten that cavalry with an infantry division has other duties to perform besides reconnoitering.

On the other hand, we should not demand too much of the small patrols mentioned, which are conducted by officers when on important reconnaissances. We cannot expect them to rove alone far over the country *in hostile territory with an enemy near by*. If they had no cavalry support behind them, they would be doomed to destruction. Only a considerable force of cavalry can afford to push out patrols simultaneously on all roads and in every direction, and assure them the necessary security by detaching entire squadrons and by its own position. In such situations the problem can be solved only by a larger mass of cavalry, and the extent and sphere of its exploration is determined by its strength. It can even be expected that large masses of cavalry, although at great distance from the main force, should not seek to avoid engagements when on reconnaissance duty.

Major-General B—— sent forward only the smallest possible number of horses, as it was yet early in the morning and there was no foretelling what demands might be made on the cavalry during the day. Nevertheless, in view of the fact that scouting on the most extensive scale is always necessary, such procedure might not be fully justified, and for this the division cavalry should be despatched when larger masses of cavalry are not available. Furthermore, the situation was soon changed when the Second troop of the Fourth squadron reported that hostile dragoons prevented its crossing the Kriblitz ravine.

It was desirable to obtain quickly some information regarding conditions at Trautenau: for this purpose the general must allow the remainder of the hussar regiment ($2\frac{1}{2}$ squadrons) to go forward, and these would probably be involved

in a cavalry fight. But if such an action occurs near troops at rest, it is bound to draw all into the engagement. The bringing forward of the battery could then hardly have been avoided, as well as the despatching of the leading battalion to the support of the hussars while another battalion took its place. Moreover, if it had been in accordance with his intentions, the division commander would at the start have ordered the advance of the hussar regiment. And finally, the situation was not new, for the presence of hostile cavalry near Trautenau was known for a long time. All these, however, were only excuses. The main error remains, that neither the division nor the brigade commander knew how to employ his cavalry; the reconnaissance should have been made by the entire 3 regiments of cavalry at hand.

As already stated, it would have been perfectly proper to place the hussar regiment in front of the advance guard infantry during the advance to Parschnitz, and as soon as Parschnitz had been reached by the advance guard, the cavalry brigade should have been brought forward from the rear of the Second infantry division.

Major-General B—— failed to make further dispositions when the presence of hostile dragoons was reported near Kriblitz. But the entire situation changed when, at 8:28, the approach of a hostile column of all arms was reported by the Third troop of the Third squadron. It was necessary to advise the division commander of this as quickly as possible, nor must any time be lost by a personal corroboration of the report, desirable as this might have been. But to avoid sending forward anything that was incorrect and thereby creating alarm, the general closely questioned the non-commissioned officer, and then sent his report, by an officer, to the division commander, while he himself proceeded to the front to reconnoiter.

As superior cavalry had driven in the troop of the Third squadron and prevented a closer inspection of the enemy's movements, all possible means must now be employed in order to gain the necessary information; and although the ground in front was broken and covered with patches of woods, this could only be quickly accomplished by the cavalry.

Under these circumstances the division cavalry must repulse the cavalry of the enemy, using its whole force if nec-

essary. To do this, it was essential that the superior commander assemble at the point of danger all the cavalry available, and, if the achievement of the immediate object in view lay in a forward movement, to see that no part of it was held back as reserve. Accordingly the hussar regiment was brought to the front, although, as it appears, the commander did not think of the First cavalry brigade with its horse battery, when the use of the latter would have insured absolute certainty with regard to the enemy.

It often happens upon such occasions that the responsible commander is insufficiently instructed, by reason of not having received a definite order or sufficient information concerning the general situation as far as it affects him. But this latter is quite necessary. Imagine for a moment that the regimental commander has up to this time had no knowledge of the messages received, and that from his former position he could not obtain a good view to his front; suddenly he is confronted with an entirely new situation; he does not know whether the dimly seen scouts riding about a mile to the front are his own hussars or hostile cavalry. If at such a great distance friendly bodies were in his front, he would have to advance differently than if he must be prepared to encounter the enemy at any moment. His order should therefore not simply state that the approach of a hostile column of all arms on the Königinhof-Trautenau highway had been reported, its head having just reached Hohenbruck, and that he should advance with his regiment toward Hohenbruck to reconnoiter more closely, but it should state in addition that the mounted men visible belonged to a troop of his own regiment that had already been sent in that direction.

Major-General B——— should rather have worded his instructions thus: "The marching column you see over there is a column of the enemy. It has just entered Hohenbruck. Over there to the left front near the next village, which is Alt-Rognitz, a troop of your regiment has watched the advance, but has been forced back by hostile dragoons. The scouts there belong to that troop. Go forward in the same direction and reconnoiter the enemy, as I am anxious to be promptly informed as to his strength. Over there on the right flank, where the deeply cut ravine of Kriblitz can be

seen, is the other troop of your regiment; but it could not advance farther because superior hostile dragoons are south of the ravine. A battalion of infantry will occupy this hill for your support in case of necessity."

Of course more time is needed for giving such instructions than for giving a short order, but if a commander goes on in advance of his regiment, the necessary time can be found. At all events, it is better to lose a few minutes than to lead troops suddenly into ground and into a situation of which they cannot be expected to obtain a correct and prompt survey themselves.

The most frequent errors in this connection are made in bringing up reserves. Nearly all the reinforcements brought up at Ligny on the 16th of June, 1815, from the reserves of the First and Second Prussian army corps, received the order to throw back the enemy. Thereupon the troops rushed into the village, often when it was absolutely unnecessary to do so, and always advanced farther beyond the edge of the village on the side of the opponent, the only instructions being to "throw back the enemy." In every case this resulted in their turning back themselves, so that the enemy again entered the village on the heels of the retreating Prussians. But if the various commanders had known how the battle had progressed before they participated in these rushes, they would probably have made other dispositions. It would have been better had their instructions been, "Move up to Ligny and report to General X——, who is now in command there." Then it would have been the duty of the latter to instruct the various commanders, and a proper direction of the entire force, according to a uniform plan, would have been possible.

In case of an unsuccessful action, the support of routed cavalry is always more necessary than that of infantry. Therefore, wherever possible, cavalry will be supported by infantry. For this reason Major-General B—— brought his leading battalion up to the nearest covering hill (531).

As we have seen, upon receipt of the message relative to the approach of the enemy, Major-General B—— rode forward to reconnoiter in person. Before placing troops in action, the commander should first see for himself, if possible. Of course, with larger masses this is not always practicable,

else half the day would be spent before troops received their march directions.

Napoleon I. gave expression to the rule, "*On s'engage et puis on voit.*" But to open an engagement in order to see is nowadays dangerous. Long-range fire inflicts losses on reconnoitering troops and gives rise to a partial defeat, while the commander-in-chief, on account of great distances, himself can see but little. Modern ideas rather call for reconnoitering by cavalry, officers' patrols, and mounted riflemen, and with larger forces by means of balloons, and in all cases by the use of good field-glasses.

At the same time the hussars advanced, the general brought the remainder of his force up to the southern edge of the woods. He did not then hesitate a moment about disturbing their rest. As it was possible that the near-by enemy might soon advance to attack his brigade, the brigade must be prepared for the attack. Such an advance might first be expected from the direction of Kriblitz or Hohenbruck. And no matter what position the Third brigade might occupy, the ground about was not in its favor, as the terrane was wide, the field of fire limited, and the conditions for withdrawal difficult. But in this, as in many similar cases, the ground had to be accepted as it was, for the general situation demanded that there the enemy's attack be met.

If the general had intended to deploy the brigade along the southern edge of the woods (509 to 504), his choice of position would not have been very fortunate. The brigade was not able to occupy such an extended line; there was nothing for the flanks to rest upon, and no position from which artillery might cover them; it was hardly possible to conduct the action, and, furthermore, before its center was a commanding ridge (554 to 531) from which the entire position could be taken under fire.

It probably would have been better had the brigade commander first occupied Hill 531 with the battery and 1 or 2 battalions, keeping the other battalions behind it in close order as reserve. He would then have been in a position to give immediate support to the defense of the hill, which was not unfavorably situated, and could take in flank any advance of the enemy which might possibly follow from Kriblitz in a

northeasterly direction. It was not within his province to advance independently to the attack. From his own standpoint, the dispositions he intended to make for defense were the more perfectly correct, and the division commander could only approve them, although the latter at once determined to pursue an entirely different course.

The directions given by Major-General B——— when issuing his orders to the brigade for its attack upon Kriblitz, which then followed, seem to be, in part, judicious. He left to each unit its full independence, his orders having been directed to the commander of the Second infantry regiment, to the independent Second battalion of the First infantry regiment, to the battery, to the engineer company, and to the sanitary detachment. At the same time he gave each subdivision its task, designated the direction of march, provided for uniformity in the advance, and oriented each part with reference to adjoining parts and with reference to the hussars still in front. It was not necessary to tell the Second battalion of the First regiment of this last fact, as the advance had been made under its eyes. Nevertheless the brigade commander somewhat anticipated the action of the battalion commander, in a correct manner, by ordering a wheel to the right, by which means the battalion commander could at once orient himself in the entirely new situation.

As regards the opening of the attack, the battery commander was not left with the direct selection of the most appropriate position. The choice of such position is a very important matter, upon which the success of any decisive attack depends. It would indeed have been rather venturesome to occupy Hill 366, as the hill was only about 1,400 yards from the eastern boundary of Kriblitz. Furthermore, it was not simply the question of an attack upon Kriblitz, but a flanking of the hostile artillery upon the Hopfen Mountain. Hill 531, near which the advanced battalion was previously stationed, would have been preferable, in that it would bring the battery out of the infantry fire. A little more or less than a thousand yards does not matter when guns are once within range. But Hill 531 offered an unfavorable field of fire on Kriblitz and the Hopfen Mountain; besides, the battery would soon lose connection with the infantry, and would remain en-

tirely uncovered in the direction of Alt-Rognitz, as the hussar regiment had been assigned a special task and was not bound by consideration of the battery. Moreover, the position east of Hill 366 seemed to be more exposed than it really was. A considerable force of hostile infantry could not as yet have been in Kriblitz. If a few companies did actually direct their fire on the half-covered battery, sufficient skirmishers of the Third infantry brigade would have been on hand to keep down their fire. The battery alone was in a position to keep off the enemy, by using shrapnel. It would have been wrong to go into action at such close range in a planned attack against a position occupied by the enemy.

Two battalions were employed on the first line, and although the actual attack was directed against Kriblitz, the ridge along the left flank could not be ignored; for this reason the orders issued to the brigade were not entirely unobjectionable. The employment of 2 battalions at the outset appears fully sufficient; nor can any criticism be offered against joining the Second battalion of the First infantry with the right-wing battalion (Third of the Second infantry), which was next to it and which must first take up the new direction. The common point of march direction, however, was designated too far to the north. According to it, the advance movement of the Second battalion of the First infantry would barely touch the northern slope of Hill 554, and this was hazardous, as the appearance of hostile infantry was first to be expected in the southern part of Kriblitz and at the ravine. It would have been better to direct the left wing of the Third battalion of the Second regiment upon the center of Kriblitz. The two other battalions would remain disposable as reserves, ready to be employed against Kriblitz, or also, should it become necessary, at Ridge 554.

On the advance the brigade commander had to consider the enemy as well as his own troops. He must see that his two leading battalions maintained the direction of march and acted in concert; as for the battery, he must see that it was in condition for further use as soon as it had accomplished the first duty assigned it; and lastly he must see that the two reserve battalions were kept for their destined purpose. As regards the reserve battalions, he must not lose sight of the fact

that, since they followed their own Third battalion, after the latter got under fire it would have to advance more slowly, whereby the distance to the following battalions would become less and they would be tempted to crowd into the first fighting line. At any rate, such crowding happened many times during our last war, and often regimental commanders allowed themselves to be carried away in an effort to interpose the second and third lines as soon as the advance of the first line had to slow up. Such a step is justifiable only in case of a decisive attack after fighting that has lasted for some time and a superiority of fire has been attained. In the brigade commander's order to the commander of the Second regiment, the injunction to "follow with the two other battalions * * * as reserve and at my disposal," was therefore not superfluous. But for all that, continual surveillance of the execution of the order was necessary.

Which battalion of the Second regiment the regimental commander should send forward and in what formation the two battalions of the first line should take up the march, concerned only the respective commanders. The brigade commander had occasion to interfere only when he discovered a manifest error, such as a battalion advancing too long in close column or failing to maintain the proper direction or connections.

The first interference of Major-General B—— occurred when the Sixth and Eighth companies of the First regiment advanced in rather a reckless manner; it is true this interference was somewhat late, but this may be explained by the fact that the general remained with the reserve on Hill 366 as long as he could overlook the fight. It was evident that the Second battalion of the First infantry lost alignment, else its left wing could not have gotten so far in the little woods east of Kriblitz. The mounted riflemen called the battalion commander's attention to the hostile infantry south of Kriblitz, and the battalion wheeled toward the south of its own accord. No criticism could be made against this, but the battalion should have reported the fact at once, and under no circumstances should have permitted two of its companies to cross the ravine and make an independent attack. The action demanded independence of the subordinate leaders within their

respective commands, vigilance regarding the enemy, but also mindfulness of the common commander and the situation. The commanders of the Sixth and Eighth companies completely disregarded the two last considerations. As it was only intended to use the Second battalion of the First regiment as a containing force after it had encountered the enemy, until the influence of the right wing could be exerted, the order was given to the battalion commander to desist from the attack. This order had to emanate from the brigade commander; otherwise there would have been danger that the battalion commander would seek only to overthrow the forces opposed to him, and probably used his entire unsupported battalion for that purpose.

As the enemy did not defend Kriblitz itself, the Third battalion of the Second infantry, which was on the right wing and which had crossed the ravine, turned of its own accord against the patch of woods still occupied by the enemy, but as that movement coincided with the intentions of the brigade commander, he did not interfere.

Often movements of this character, even when conducted by subordinate bodies of troops, happen to be very decisive at certain stages of the action, while later disputes frequently arise as to the party who should receive the credit for having initiated them. Without here recalling the fact that credit should not be sought in the simple performance of duty, and that the degree of credit cannot be measured by a foot-rule, we wish to emphasize the fact that the superior, even though he has not given the order, remains responsible for all he permits his subordinates to do under his eyes. If the brigade commander quietly approved this turn toward the ravine, it must have become evident to him that his order for attack rested upon a false supposition; Kriblitz was not occupied by the enemy at all. The division commander too had only ordered the attack in the "direction of Kriblitz." It would have assumed a more simple and uniform plan had the brigade commander designated a more distant point of direction, even via the Hopfen Mountain. Holding of the edge of the Aupa valley was assured by the echeloning of 2 battalions behind the right wing. By this more judicious designation of the direction of march it would have been possible to avoid the "left wheel"

of the Second infantry regiment in Kriblitz, a movement that cannot be executed by skirmishers and deployed companies, and which must certainly have caused a troublesome crowding among the former. The regimental commander probably regretted that he had allowed the First and Second battalions to form company columns near Hill 366. A change of front could have been executed much easier in column of march or column of platoons.

The brigade commander's order for the attack supposed Kriblitz to be occupied by the enemy. If the troop of the Fourth squadron of hussars had made no report on this matter at the proper time, mounted riflemen were at his disposal for reconnoitering. Furthermore, it would have been advisable for him first to gallop to Hill 366 and give his orders after he had obtained a good view from that height. As it was, the entire movement turned out favorably in the end, as the enemy soon withdrew; and although the brigade did hold its ground, it might have been led into very serious difficulties.

As soon as the right wing advanced upon the Hopfen Mountain, it became necessary to obtain information relative to conditions in Trautenau. If this was not done voluntarily by the troop of hussars or the battalion on the right wing, the brigade commander himself would have to order it. The sending of the engineer company into the city was certainly in accord with the general situation, but that fact was known only to Major-General B——, and therefore the order must come from him.

Report of the retreat of the enemy was sent to the division commander, and the latter's order for the brigade to reunite was duly executed.

Finally, it should be stated that the uncertainty caused by the news of the approach of a hostile column along the Aupa shows anew how necessary it is for superior leaders to have full information relative to the movements of any columns with which they are likely to come into contact.

THE FOURTH INFANTRY BRIGADE FROM 8:40 TO 11:30.

At 8:25 the entire Fourth infantry brigade was assembled at the rendezvous near Parschnitz, and the Second battalion of field artillery had also arrived there.

When the report of the enemy's approach was received, the brigade got under arms (8:45), and at 8:50 it received orders to cross the Aupa near Parschnitz with the Second artillery battalion.

The brigade commander, with the commander of the artillery regiment, hastened on in front, and at 9:35 arrived near the division commander, who was on Hill 504 (a mile and a quarter south of Parschnitz), from whom the former received instructions to continue the march for the time being upon Alt-Rognitz through the open country, while the Third brigade, on his right, should advance to the attack of Kriblitz. The artillery commander was instructed to post the Second artillery battalion on Hill 531.

The brigade advanced in two columns, the Third regiment on the right and the Fourth on the left. The battalions were in column of march, in the order of Third, Second, First. When the leading squads reached Hill 504, the 2 Third battalions formed company columns and were drawn out in two lines at intervals of 130 yards, and distances of 220, the companies of the second line echeloned outward. The First and Second battalions remained in march formation, halting for a short time to re-establish order and to close up. The commander of the Second artillery battalion received orders by his adjutant, whom he had sent ahead to his regimental commander, to take a position in readiness, covered, north of Hill 531; this movement was executed at a trot, in order to quickly make room for the infantry, and was executed in column of pieces in such a manner that the entire division was deployed by the command, "Left front." Half of the caissons of the batteries halted 220 yards north of the battalion, a position south of Hill 504 having been assigned to the remainder.

The regimental commander had not carried out literally the order of the division commander to take position on Hill 531, and with good reason. In the first place, he saw no objective before him: besides, he first wanted to have infantry between the position and Alt-Rognitz. Meanwhile the battery commanders were brought up from the position in readiness, and sections were assigned to the individual batteries. The battery commanders dismounted while performing this duty, so as not to attract the attention of the enemy. Scouts kept

up communication with the hussar regiment, and scouts were also sent forward, by direction of the regimental commander, toward Rudersdorf and Raussnitz, to secure the left flank.

At 9:50 Hill 531, where the division commander was standing, was crossed by the companies of the Third battalions, and the march direction toward the southwest assumed, while the left-wing battalion of the Third brigade was already engaged near the Kriblitz ravine. Major-General C——— was here informed that the enemy was evacuating Trautenau, and that, in conjunction with the hussar regiment, he should drive the enemy's retreating forces back as far as possible, while the Third brigade should reassemble on the heights south of Trautenau.

As the commander of the artillery regiment now observed hostile infantry columns in retreat south of the little woods of Kriblitz, he directed the Second battalion to go into position. Two batteries posted themselves behind Hill 531, and the left-wing battery on the eastern slope to the east of the patch of woods. There they received rifle fire from the Kriblitz woods, though at long range, and 1 battery was obliged to open fire on the edge of the woods, while the others followed the retreating bodies with shrapnel. In so doing they were forced to fire over their own infantry, but as the latter was moving down a depression in the terrane, they were not endangered by the artillery fire.

The right wing of the Third battalion of the Third regiment (the Ninth company) turned toward the woods. Two platoons, deployed as skirmishers, and the third platoon, in close order 210 yards to the rear, very cautiously took advantage of the undulations in the ground. However, the enemy soon evacuated the edge of the woods, which the company entered without difficulty and came in contact with skirmishers of the Third brigade. Some prisoners were taken. The men who had pushed forward into the open terrane to the south were received with such a brisk fire that they hurriedly retreated into the woods again.

Meanwhile the enemy had also posted a strong force of infantry on the isolated and wooded hill (425) at the north-western entrance of Alt-Rognitz. During a short halt the entire Ninth and Twelfth companies of the Third battalion of

the Fourth regiment deployed against that position as skirmishers, further to the north of the ridge in front and the Eleventh company was brought up out of the second echelon for the purpose of prolonging the left wing, forming two platoons into a skirmish line, while the third followed in close order as flank cover on the extreme left. The Tenth company remained in the second line, behind the center.

The other battalions of the brigade continued the advance by regiments, one alongside another, in columns of platoons, from 220 to 330 yards from the battalions in front, following the undulations of the terrane for purposes of shelter.

The attempt of the five leading companies of the Third battalion to cross the crest of the ridge (500) without halting, miscarried, as considerable losses forced the skirmishers to lie down and open fire by command. With some attention on the part of the platoon leaders this loss could have been avoided, if the skirmishers while yet unseen had lain down behind the ridge, fixed sights, and had suddenly opened fire by command. As nothing could be seen from the bottoms, the officers dismounted, and, contrary to custom, the commanders of the Third battalions went up into the foremost fighting line. When the Eleventh company of the Fourth regiment enveloped the enemy's right flank, and the Twelfth company of the Third regiment, followed by the Tenth and Eleventh companies, had cleaned out the patch of woods west of the sunken road leading from the Hopfen Mountain to Alt-Rognitz, the opponent evacuated his position and retreated upon some squadrons located farther to the rear.

The companies of the Third battalions in the first line closely followed the retreating enemy. The greater part of the Eleventh company of the Fourth regiment turned into Alt-Rognitz, while the Tenth company of the same regiment was sent to the wooded hill just abandoned by the hostile forces.

The rest of the brigade crossed Ridge 500, but, as it came too close upon the slowly advancing firing line, it had to be halted by the brigade commander at the foot; in a meadow that extended to the northern slope of Hill 425 it sought cover against the fire of the three hostile batteries that were posted among the thickets before Neu-Rognitz.

The Second artillery battalion had unlimbered on Hill 500, and was firing on the retreating parties below.

This was the situation when Major-General C—— received the order of the division commander to withdraw his leading battalions and take position with the brigade on both sides of Hill 425, securing his left flank; in consequence of this order he sent his aid to the Third battalions with the following instructions:

To the battalion of the Fourth regiment: "The battalion will discontinue the pursuit, and will occupy the little woods near the sunken road, which it has already taken."

To the battalion of the Third regiment: "The battalion will discontinue the pursuit, and will occupy the little woods near the defile, which it has already taken."

These orders were carried out. So as not to give the enemy's artillery, which was directed against the retiring Third battalions, too favorable a mark to fire upon, the leading companies remained in extended order, while the Tenth and Eleventh companies of the Third regiment, which had meanwhile assembled, marched alongside each other by squads.

At 11:10 the brigade occupied the following positions:

The Eleventh company of the Fourth regiment occupied the farm-buildings nearest to the western entrance of Alt-Rognitz and covered itself by sending forward a half-platoon to the village street, and another before the western edge of the village. The Tenth company of this regiment was on Hill 425; the rest of the battalion assembled behind it.

The Tenth and Eleventh companies of the Third regiment were in the little woods west of the sunken road running from the Hopfen Mountain to Alt-Rognitz. In the rear and as reserve was the Twelfth company, with the Ninth company, which, however, consisted of only 2 platoons, part of the company having attached itself to the Third brigade in the Kribnitz woods.

The First and Second battalions of both regiments formed on both sides of the thicket lying to the east of the sunken road.

So far during the engagement the formation assumed by the brigade in motion was that of regiments side by side by wings, the battalions following one behind the other. In the

last moments and after its subdivisions had been reunited, the Third brigade had also adopted this formation. In another formation for assembling a brigade each line is composed of the battalions of the same regiment, one regiment following the other by battalions in double column. But, according to Drill Regulations, the first formation was equally correct. How far the advantages and disadvantages of the second are observable in the progress of an action will be touched on later; the first formation would, however, be preferable for the march of a brigade across fields. In any case, two battalions moving with one front can be more easily led than three, obstacles can be more easily avoided, and a change of front more easily effected. In advancing by regiments one behind the other, three columns are formed, or even more than three, and the center column is crowded first from one side and then the other, while the columns themselves are each composed of different regiments. True, it is often said, we can march better in three columns than in two; this, however, applies only to roads, while in a field the fewer columns there are the more easily can troops be kept together. Besides, with the wing formation, each regimental commander has his battalions together in one column. In the formation of the Fourth infantry brigade it was not a question of the rigid use of the double column while under hostile artillery fire. The battalions were so grouped that they could withdraw independently, if at all, from the fire of the opponent. The Third battalions were still extended in company columns, while the other battalions, in the second and third lines, could use line of companies in platoon columns, single column of platoons, or double column of platoons, according to the terrain.

In advancing to an action it appears necessary to leave the several battalions in march formation as long as possible, for in such manner each battalion can cross the ground more easily and with comparatively less exertion than in double or single column of platoons. Often when we come near to the enemy it will be possible to deploy at first only the head, and to let the following battalions deploy whenever the head becomes engaged as was the case here. There was no necessity for the first and second battalions forming single columns

of platoons. The deployment for action could have been easily accomplished from the march formation.

In an advance, brigade and regimental commanders must be constantly on the watch to see that the original order is properly maintained. If it should be disturbed by the character of the terrain, it is better to halt and re-establish it. This will be especially necessary in passing through woods, since a formed brigade when entering woods will generally be thrown out of order, as it will there meet with denser timber, hills, meadows, or a view obstructed; in such cases Regulations specifically prescribe a shortening of distances.

The commander of the Fourth brigade had to see that the leading battalions kept connection, and that distances were preserved by the following subdivisions. He was certainly right in halting the main body when it came too near the first line, and was equally right, from his own standpoint, in allowing them to follow on the heels of the retreating enemy, although the division commander saw fit to suspend the pursuit for other reasons.

Finally, it is a question whether the Ninth and Twelfth companies did right in deploying the whole line as skirmishers on the crest of Ridge 500. Regulations caution against this, and permit such a disposition only in exceptional cases. However, the Tenth company followed as support, and the situation called for a rapid deployment of the skirmishers. The Eleventh company, which was on the left wing, should have retained 1 platoon in close formation under all circumstances, which it in fact did.

THE DIVISION CAVALRY REGIMENT FROM 8:40 TO 11:30.

Thus far the work of the hussars consisted of scouting and orderly and requisition service. Although the force was indeed expended with economy, it is nevertheless seen how quickly it will crumble away and become disintegrated by these tasks, and it cannot be too strongly urged to proceed in this with the greatest caution.

When the regiment was brought up to reconnoiter the enemy's approach, it was required to be as strong as possible, since it might probably have to accomplish its purpose by

force. But the commander had only $2\frac{1}{2}$ squadrons available. In like manner the leader of the Fourth squadron with the advance guard saw his troopers reduced to one-half when the enemy approached it. In time of war we are too prone to resort to the use of entire troops, or even squadrons, instead of small patrols; in such cases the regiments may appear on the battle-field possibly more scattered and reduced than happened in this case.

Considering the fact that the same demands are made on 600 horses day after day, we should not expect too much from a division cavalry regiment in an engagement. Its special employment should be scouting and security service for the division. In this way the regimental commander can relieve his general of many detailed dispositions, and become of great value by his personal enterprise and industry. Although the commander should not lead the mass of his regiment away without orders from the division, he can scout in all directions and keep up communication with adjoining columns *by means of small patrols, without such special instructions*. But this, on the other hand, requires that his superior commander inform him fully as to the situation, a condition that will only happen when the regimental commander makes the division commander's cause his own cause, and devotes himself wholly to the end in view.

If the enemy drives back the smaller patrols or forces them to halt, then that part of the regiment which is still intact will usually be obliged to come to their assistance. For this reason it is generally the division commander's business to bring the regiment to the place from which it can render effective service at the right time. During the advance of the division on a road in the early morning, the cavalry regiment was accordingly attached to the advance guard. But as the ground opened out on the left flank in the direction of the enemy, only one squadron was left with the advance guard, the remainder being assigned to the left flank detachment of Major-General B—— (Third brigade). As soon as the Fourth brigade reached the left of the Third during the further advance, and conditions on the left demanded scouting at great distances, the division commander again had the

hussar regiment at his disposal for this purpose, only one troop remaining in front of the Third brigade.

As a rule, the cavalry regiment receives its orders direct from the division commander, and only when attached to a separate detachment should it be placed under the orders of the detachment commander. Only too frequently, when a new task must be assigned a cavalry regiment so attached, it is taken away without information being given to the detachment commander concerning the altered circumstances. This should not be. The superior headquarters issuing such new order must communicate it to the detachment commander, and it is the duty of the regimental commander, if the order has not reached him through the detachment commander, to report his departure to the latter.

Further, effective scouting in front of the infantry allows it to remain in convenient formation for march up to the last moment, and may even guard it from sudden artillery fire. When conditions demand a considerable dispersion of troops, it is therefore proper to assign a troop of cavalry to each of the several brigades, to scout in their front, in case it does not appear feasible to employ the regiment as a whole for such purpose; such indeed was done in the case before us. By means of mounted riflemen infantry regiments are able to scout independently in their front for distances of half a mile or a mile. The Second troop of the Fourth squadron could have been relieved from the duty of scouting toward Kriblitz and replaced by mounted riflemen. The mounted riflemen sent forward on Hill 554 by the Second battalion of the First regiment did not conduct themselves skillfully, because they either failed altogether to report the occupation of the Kriblitz woods by the enemy, or else reported it too late. The leading battalions of the Third infantry brigade did send their mounted riflemen ahead during the last halt opposite Neu-Rognitz, but those of the Fourth infantry brigade neglected to do so. When finally the Fourth squadron assembled north of Hohenbruck, the commander of the Third brigade could spare it and return it to the cavalry regiment, as he had under his command, mounted, 2 non-commissioned officers and 18 riflemen. By so doing the cavalry regiment would have attained a strength of nearly four squadrons.

THE DIVISION ARTILLERY REGIMENT FROM 8:40 TO 11:30.

Only the Second battalion is seen in joint action, the batteries of the First battalion having been otherwise employed.

Although circumstances may call for such a division of force, it should be resorted to only when **absolutely necessary**. On account of the great extension of the Second infantry division a necessity existed in this case, as well as by reason of the independent tasks assigned to the two brigades employed on the first line and to the advance guard.

As a rule, we should strive to keep the batteries together in action under the guidance of the regimental commander. The division commander should avail himself as far as practicable of the division artillery regiment as a closed body of troops, and understand how to handle it in this sense. In battle the division generally needs the combined artillery effect. And even when there is only room for isolated batteries, these must never develop an arbitrary activity according to the personal views of their commanders.

The division commander must therefore not let his artillery get away, but he must employ it, and give it the necessary orders. The same may be said of other commanders to whom artillery has been assigned.

The presence of the regimental commander in the division staff was a judicious measure, but in an action he should be where more than one of his battalions are employed.

Should it become necessary to oppose the enemy in any one place, it will be well to employ all batteries available. When the hostile artillery opened fire against the Second battalion (less the Third battery), the horse battery did not wait to see if the latter succeeded in beating off the opponent, but hurried forward at once to the fighting line. Later the Third battery also came into action against the same objective.

Further, should the advancing infantry become engaged and objects for artillery fire appear, the artillery should accompany the advance as far as its own security will permit, so as to prepare for the attack as long as possible, as was done by the Second battalion upon the first start of the Fourth brigade. As soon as the enemy withdrew, the artil-

lery should rejoin the troops to which it belongs; otherwise it should remain in the position it has occupied as long as necessary.

Although an artillery action must generally take place at a distance of $1\frac{1}{3}$ to 2 miles, in many cases we may have to open it at longer ranges.

It is seen that thus far the fight of the Second infantry division succeeded, also that the regiment of artillery had but few opportunities to come into action. Yet its commander cannot escape censure for having permitted matters to take their own course and not having himself interposed. He accepted all the dispositions of the division commander without objection from the artillerist's standpoint, although there was occasion for raising objections. Especially was this so when, at 7 a. m., the division commander divided the First battalion and left two of its batteries in the Aupa valley; it was the regimental commander's duty to call attention to this severance of units. Besides, the regimental commander could have had seven batteries at his disposition during the action, as the division commander would have assigned the horse battery to him, if requested, and this was sufficient for the part of the advance guard in the valley of the Aupa. If he had familiarized himself with the situation and the terrain, a decisive artillery effect would have followed on the southern bank of the Aupa. If he had arranged with the division commander to have the First battalion, in close order, follow the Third brigade, in the same manner as later the Second battalion joined the Fourth brigade, he would have had all his batteries in hand and could have appeared on Hill 500 (northwest of Alt-Rognitz) with 36 guns; as it was, shortly after 11 a. m. the Second battalion was upon this hill, while the First battalion was over a mile away, near Hohenbruck. Had the engagement not come to an end at that time, it would have been difficult to secure the combined employment of the artillery. Near Neu-Rognitz three hostile batteries were under fire; the Second battalion could indeed dispute with them, but it was not likely soon to gain superiority over them. On the other hand, the two battalions, if they had been united, could have attained a superiority of fire in 15 minutes.

PROBLEMS.

Here are a few problems, as at the conclusion of Part I., which, by means of assumptions that may be very readily suggested, can be solved in connection with the situations we have just been considering. These are, however, only specimens, showing how great a latitude may be given to such studies by independent work.

Page 71: The report of the enemy's approach came from the flank detachment near Welhota, and stated that its advanced patrols had encountered the enemy, who was advancing from the direction of Kaussnitz. Give the dispositions of the division and the various detachments.

Page 71: Upon receiving the report of the approach of hostile columns upon Hohenbruck, Lieutenant-General A——— decided to deploy his division in a defensive position and await the arrival of the First infantry division. How was the division disposed?

Page 71: After receipt of the above report, the division commander decided to immediately employ the First cavalry brigade and the hussar regiment for further reconnaissance. Give the orders to the cavalry and a detailed statement of the course pursued by the same.

Page 74: The enemy occupied Trautenau, but deployed his main forces on the Kriblitz-Alt-Rognitz line. How should the attack upon this position be initiated?

Page 77: When Major-General B——— received the order, he was also advised that the highway to Liebau was damaged to such an extent that the arrival of the First division could not be counted on for 4 hours. Shall Lieutenant-General A——— carry out his present intentions?

Page 78: While the division commander was about to set the Fourth brigade in motion, reports came in from the cavalry in advance, establishing a considerable superiority of the enemy and placing its strength at about an army corps. What courses of action will the general decide upon? What orders will he give?

Page 79: The division advanced in the manner described, when advice was received of the advance of a second hostile column in the valley of the Aupa, via Raussnitz. What orders will Lieutenant-General A—— issue?

Page 80: The enemy evacuated the position near Trautenau, but, instead of retreating on the Hohenbruck road, withdrew via Arnau. What will the division commander do?

Page 83: Lieutenant-General A—— decided to follow the enemy after occupying the position of Trautenau. Give the division commander's orders.

These assumed situations may serve as a basis for further problems if the strength of the troops is changed; for instance, we could assume that, instead of the Second infantry division, there was only a brigade of 6 battalions, 4 squadrons, and 2 batteries, or a detachment of 3 battalions, 2 squadrons, and 1 battery, on the spot. These troops could be regarded as either the advance guard of a column in the rear, or as acting in a perfectly independent capacity.

Beginning with page 116, we may likewise bring the different parts of the division in entirely different situations, either through orders from Lieutenant-General A—— or measures of the enemy. For instance, Lieutenant-General A—— could receive the order to hold the wooded ridge for the time being, and at the same time be attacked from the direction of Kriblitz, Alt-Rognitz, or Raussnitz. Only a small detachment might advance to attack him, and so induce him to make a counter-attack on his own responsibility.

Furthermore, the enemy might have occupied the country about Kriblitz in force and induce the Third brigade to push home the attack as soon as the Fourth brigade, on its left, made no progress. It would be interesting to picture the details of such an attack, with all its vicissitudes.

Assumed changes in the character of the terrain would demand manifold changes in measures adopted. We might assume that there was a level or rolling country from the wooded Hill 504 up to the Trautenau-Hohenbruck road, or that the country to the west of the Kriblitz-Alt-Rognitz line was covered by a dense forest. If we apply to such a terrain the various assumptions mentioned above, a multitude of new

problems will arise, the solution of which will clearly illustrate the heterogeneity of military situations which may appear to be quite similar, and the study of these in all their parts will afford an excellent opportunity for the exercise of judgment, resolution, and dexterity in giving orders.

PART III.

DISPOSITIONS OF THE CORPS COMMANDER BETWEEN 11:30 A. M. AND 12:45 P. M.

At 11:35 Lieutenant-General A—— came up with the corps commander, who was with Major-General B—— south of St. John's Chapel (Hill 504). He reported what had previously occurred, and also the state of the engagement at that time.

His troops were ready to comply at once with any order the corps commander might issue. (Their position is shown on Map IV.)

The enemy in no wise appeared to have abandoned his intention to offer resistance. The strip of woods along the highway north of Neu-Rognitz, the thickets northeast and east of the village, as well as the Sorge quarry, appeared still to be occupied by strong bodies of his infantry. Near the quarry 1 battery which had recently come on the field had gone into position, also 3 others not far from the eastern edge of Neu-Rognitz, sending an occasional shrapnel into the position of the First infantry brigade.

On account of the position of the corps, its aim, and its connection with the Guard corps, which was expected to reach Eypel during the day, the presence of the enemy so near Trautenau could not be permitted.

The head of the First infantry division had become visible on the Liebau highway on line with the western entrance to Parschnitz, and, as its early assistance could therefore be expected, the corps commander resolved to continue the action with the entire force at his disposal, and to renew the attack without delay. He accordingly directed Lieutenant-General A—— to continue his hold on the highway, and to attack the enemy in front and at the same time to turn his right flank.

The First infantry division in the meantime was to deploy west of the Galgen Mountain, for the eventual support of the attack. Orders were also at once despatched to the corps artillery (8 batteries) to advance rapidly to the heights south of Trautenau.

The cavalry brigade now passed again under the direct orders of corps headquarters, of which fact the division and brigade commanders were duly advised. The brigade commander was at the same time instructed to secure the right flank of the Second infantry division advancing to the attack east of the highway, not neglecting, however, to watch the road to Arnau.

It took about 20 minutes to discuss past events and further instructions, and at 11:55 Lieutenant-General A——— was ready to issue his further orders.

At the same time the commander of the First infantry division reported to the corps commander, he having hurried on in advance of his troops, and stated that the point of his advance guard had crossed the Aupa and was entering Trautenau. His right flank detachment (1 battalion of riflemen, 1 squadron, 2 guns) had reached the foot of the Galgen Mountain, via Nieder-Altstadt (see Map V.), without seeing anything of the enemy, and was already in position there.

It was now found that the corps artillery, which was ordered to hasten up, could not soon be expected. As it was placed behind the infantry, by this time it must have been far back of Wolta. Under these circumstances the commander of the First infantry division was ordered to bring up the artillery regiment of his division and support the attack of the Second division by having it take a position on the east of the Galgen Mountain. (12:10 p. m.)

Shortly afterwards the battalions of the Third brigade, then south of Hill 504, were also seen to be moving, while at the same time the general staff officer of the First infantry division of the Guard arrived with the information that it was approaching, its head on the Schömberg road about $1\frac{1}{4}$ miles from Parschnitz, and that its commander was anxious to know the state of the engagement, and also if he could join it and give support, and if so, the point of juncture. The general staff officer was at once advised by the chief of staff

of the army corps regarding past events and further intentions; to which the corps commander added: "Tell your general that I hope to overcome the resistance of the opponent, with my forces and without serious difficulty. The stand of the enemy in such proximity, however, leads to the conclusion that he expects still further reinforcements. With a view to all contingencies, I would be pleased if the Guard division would be directed from Welhota upon Alt-Rognitz, so as to be at hand to join in the action."

With this answer, the general staff officer left at 12:20 to return to the division of the Guard. At the same time the point of the First infantry division reached the right flank detachment west of the Galgen Mountain, where the division commander made his dispositions for deployment. At 12:30 he had at his disposal, however, only 2 battalions of the advance guard, the battalion of riflemen of the right flank detachment, the cavalry regiment (which had been ordered up), and a battery. The third battalion of the advance guard was engaged in deploying. The 5 other batteries of the division artillery regiment, although ordered to advance at an increased gait, had not yet arrived. The deployment of the entire division and the corps artillery could not be expected within less than an hour and a half, on account of the town streets through which it passed being so narrow and its advance guard having been separated from it.

COMMENTS ON THE DISPOSITIONS OF THE CORPS COMMANDER BETWEEN 11:30 A. M. AND 12:45 P. M.

As already indicated, the deployment of the enemy so close to his front had convinced the corps commander that he was either expecting reinforcements very soon or had already received them. Such a view of the situation was certainly not groundless. From the commanding heights south of Trautenau the enemy had been able to minutely overlook the approach and deployment of the Second infantry division; furthermore, the reports of the Windischgrätz dragoons, who had come in contact with the First division on the Liebau road, must have given him the certainty of a very considerable superiority on the part of his assailant.

Unusual circumstances alone could have induced the enemy, after a short retreat, to form his troops for action and on an extended front. *As a rule, large masses once deployed for action are forced to fight on the approach of the opponent, and are in no position to withdraw at pleasure.* To withdraw, it is necessary to be in possession of highways and roads, and, above all, sufficient time; also to leave detachments behind, which on the attack of the enemy will either fulfill their object of covering the retreat at a great sacrifice, or, if unable to hold out sufficiently long, will be thrown on the troops while in the act of forming columns of march. In the last case the entire body of troops will find itself compelled to fight with all its force, against its will, and under most unfavorable conditions.

Still far more disastrous would it be to march off after the most advanced line of the deployed troops is already engaged. Unless the unfavorable situation is counterbalanced by superior strength, defeat can hardly be escaped.

These points are deserving of the utmost consideration on the part of troop leaders. They are not as evident in maneuvers as they are in war. In proof, let us cite the engagement at Weissenburg on August 4, 1870. With 4 battalions in his first line and 5 in his second, General Douay deployed his weak division to meet the heads of Bothmer's Bavarian division and the Fifth and Eleventh Prussian army corps. As soon as he perceived the great superiority of the enemy, it seems he was sufficiently prompt in giving the order to retire. By that time, however, the troops were hotly engaged in front of Weissenburg and on the Lauter. It was no longer possible to withdraw the troops fighting there, and the greater part of the battalions of the second line, in support, were obliged to join in the action on the heights of the Geisberg, which ended with the complete defeat of the French division.

Only extraordinarily advantageous circumstances can admit of exceptions to this rule, such as a strong natural position in front, which forces the opponent to restore order after disturbance has arisen from crossing the position for the final assault. At Weissenburg, however, the fortified town and the terrane along the Lauter were of no avail, by reason of the overwhelming superiority of the German troops, and also

the fact that the direction of their approach enabled them to envelop the hostile right flank simultaneously with the attack in front.

In the case before us the opponent does not even appear to have occupied a strong line. Perhaps he was forced to risk an engagement without hope of success, by circumstances not visible to the assailant, relating, perhaps, to the direction of the entire hostile army. So there is all the more reason that the First army corps should take advantage of the situation, although it is more likely that the opponent had already received reinforcements, or expected them soon, which permitted him to risk an engagement at that time.

We can therefore find no fault with the commander of the First army corps for deciding to continue the attack and placing his entire force in readiness. The intended continuation of the march upon Arnau certainly became dubious, and for the time being prevailing conditions forbade it. The strength the enemy might develop the same day or the following could not be foreseen. Moreover, his position, which was only $2\frac{1}{2}$ miles from Trautenau, the point of exit from the defiles through which ran the only line of retreat of the corps, permitted him to close the line of retreat at any moment, simply by a short advance. Nor was there any basis for determining how great a force should be left behind to protect the point now occupied, should the march be continued. Besides, the enemy from the direction of Neu-Rognitz threatened the communication between Trautenau and Eypel, on which line the Guard corps had been put in motion.

The corps commander's determination to continue the action was therefore fully justified. Even should it assume such dimensions as to preclude an advance of a part of the corps the same day upon Arnau, the disadvantage would be more than balanced by a possible victory over larger hostile forces.

There was still another condition that had to be considered. The artillery of the two sides was only $1\frac{1}{2}$ miles apart, and the most advanced skirmishers only $\frac{1}{2}$ mile. So in any case, should the enemy stand his ground, the fire would soon commence again, and, once commenced, the action must be carried on with full vigor.

Thus it seemed to be perfectly proper to put the whole disposable force in readiness to prosecute the attack, and accept the proffered assistance of the First infantry division of the Guard. We can never have too many troops on a battle-field large enough for their deployment. The stronger we are, the better are our prospects of victory. The truth of these axioms sometimes leads to too wide an interpretation of their meaning. Thus we are often told to bring on the field of battle all available forces; that every combination must fall before a tactical victory. If this were always so, the conduct of war would be much easier than it really is.

For example, if the advantage gained on the battle-field might be neutralized or losses even result from the simultaneous advance of the enemy at other points, one would never be justified in failing to make timely provision against such danger by detaching part of his force. We must learn to dispense on the battle-field with some of the troops available.

When the Allies were carrying out their operations against Dresden on the left bank of the Elbe after the armistice of 1813, Napoleon, with the main body of his troops, was still on the right bank of that river. The possession of Königstein enabled him to cross the river with a part of his troops and fall upon the rear of the Allies engaged before Dresden. In view of such a contingency, the latter should have left a considerable force there at the outset to secure themselves against such a blow. Too little was done in that direction, and the allied armies were threatened with annihilation, which was only averted by the extraordinary bravery of the Russians, coupled with other favorable circumstances.

So, although battle demands the greatest practicable concentration of all forces, conditions do arise which, in view of the general situation, force us to employ a part of our troops elsewhere. However, as many as are not needed elsewhere belong on the field, where the decision of arms is expected.

A leader should not therefore lightly decline assistance offered by strange troops. One is often led to do so by erroneous estimates of the situation, as well as by false pride. In the engagement at Trautenau on June 27, 1866, it is known that the former was the reason for declining the actually offered assistance of the First infantry division of the Guard.

Examples of the latter may be learned from military history. It is in the very nature of strong wills to accomplish things by their own energy alone, without assistance. So it often happens that a leader will say to himself: "I and my own troops will gain this victory, and will not divide the glory with others. If I accept assistance, then my opportunity is lost; for a senior officer might arrive, who would assume command and carry off the honors himself."

Don't say, "I wouldn't think of doing such a thing!" It has happened, and it will happen again, especially when there is a chance to win a victory by one's own forces alone. We must never forget that conditions may change within a short space of time; and when the action goes amiss, all previous scruples quickly vanish, and we welcome support that hurries up of its own volition, though shortly before we had declined it.

From this it follows also that the well-known rule, to advance only to the sound of cannon, is subject to exceptions. Sometimes conditions prevail which demand that a point not yet assailed by the enemy be held at all hazards; and that troops posted there must not move to the assistance of their sorely pressed comrades, or at least in part. Such situations are of frequent occurrence. In the investment of Paris (1870-71) we have numerous examples of it.

Instructions given by superior headquarters to subordinate commanders must be explicit enough to enable them to act judiciously of their own accord in situations similar to those we have just been describing. The principle should always govern, that whenever a body of troops finds itself in action, no matter how insignificant it may appear, there is a decision of arms impending. Therefore every individual must be animated by the desire to hasten to the spot and join in. The issue is victory or defeat. Fortunately indeed, this thought has become the flesh and blood of our Army. In the orders to cross the frontier given to the Third Army in 1870 it was emphasized that if any one of the various columns should encounter the enemy, adjoining columns must change direction to take part in the action. In pursuance of this, the Fifth Prussian corps supported Bothmer's Bavarian division at Weissenburg on the 4th of August, while the Eleventh

Prussian corps advanced further than its original destination in order to fall upon the enemy's right flank.

Still more are we indebted to this principle for our victory at Spicheren on the 6th of August, 1870, an action which might easily have been turned into defeat had there been no inclination among the forces to hasten to points where decisions of arms were impending.

All that the corps commander did in the example we are now considering, as measured by the foregoing standards, appears to be perfectly justifiable. But there is still another of his measures that calls for a careful scrutiny.

At 11:55 he gave orders to the Second infantry division to continue the attack. As the troops were in readiness, and part of the enemy was less than two-thirds of a mile away, the infantry action would probably begin within a short time. Granting, however, that half an hour might elapse before the actual attack, the point of the First infantry division would then be deployed only to the Galgen Mountain. In the meanwhile the First division had advanced on the Liebau road in a formation similar to that taken by the Second division on the Schömberg road. (See Plan II.) The distances between the different subdivisions of the vanguard, the reserve of the advance guard, and the main body of the division had been well preserved. Therefore if the deployment should commence at 12:30, the division could be in position between the Galgen Mountain and Hohenbruck, ready to support the action, only in the following order: the leading regiment at 1 o'clock, the leading brigade at 1:30, and the entire infantry after 2 o'clock.

Now we come to the question, What is the limit of the fighting power of a division at the present time? Its defensive strength, in a favorable position, with flanks protected, may suffice for half or even an entire day even against a superior enemy, provided its artillery has not been annihilated. If, however, the artillery has been silenced by the superior fire of the opponent, the enemy's guns will train on the infantry of the division, and its resistance can last but a few hours. But in the attack by an infantry division different principles obtain. If the ground affords good cover for the assailant's approach, one or more unsuccessful attacks need not decide the

action, and he can still carry on the fight in a desultory manner. But if the attack must be made over open ground commanded by hostile guns, half an hour will often suffice to put even a large body of attacking troops out of action, although the entire force may be engaged (which, of course, must happen in an attack). Such indeed was the fate of Von Wedel's gallant brigade of 5 battalions on August 16, 1870, during its brilliant but unfortunate charge between Mars la Tour and Vionville.

Now, although open ground in the front favors the defense and intersected or covered ground the attack, and each party to the action will seek to choose his own ground, the kind of ground that we actually fight on will depend upon circumstances. So we must be contented with the ground as we find it.

Attacks with larger masses over unfavorable terrane cannot always be avoided. If the opponent checks our progress by occupying a position which for local or tactical reasons cannot be turned, we must assail it, if we would advance at all, no matter how difficult the ground may be. Especially is this so when, in an offensive action, a brigade or division is confined by other troops at the sides; in such case it cannot make a turning movement, and may be forced to pass over even the most open terrane.

Later on in this study we shall attempt to illustrate how such an attack should be carried through in accordance with regulations; for the present we shall make only a few remarks, referring to the management of larger masses before such an attack is undertaken.

In the case before us the Second infantry division could have gone to pieces before Neu-Rognitz before a single regiment of the other division had time to complete its deployment between the Galgen Mountain and Hohenbruck, and in such an event the strength of this one regiment would have been insufficient to change the condition of affairs.

The belated interposition of the First infantry division, then forming up, could hardly miss being accompanied by far-reaching consequences. Under the most unfavorable conditions it might find itself compelled to make an entirely fresh attack, *and instead of the combined employment of the full force of*

the corps, there would be only an isolated employment of two halves.

It is therefore advisable, when conditions will permit, not to begin an attack until all troops have reached their places. By so doing we can best prevent part of the force from being annihilated before the remainder is able to interfere. This injunction should be heeded to-day more than ever, when we consider the increased strength that the defense has gained through rapid-fire guns, and especially in case the terrain assures the defender the full use of his arms.

Even when the arms of the assailant are fully equal to those of the defense, the latter can maintain a superiority as long as he has an extended field of fire, and before the assailant has subdued him by employing a superior number of guns at mid-range or shaken him by his artillery. The assailant must be the stronger at points selected for the attack, so he can deploy a superior force. A preponderance of fire on the points of penetration must be relied on to give the decision.

There are times when a leader is not in a position to first await the complete deployment of his troops. Should his advance guard suddenly encounter the enemy, he might often have to support it by other divisions as they come up. Further than this, under the pressure of the moment battalions are thrown into action singly, one here and another elsewhere, which leads to the severance of the higher units and mixing up of troops, a condition of affairs that often proves fatal. In such cases it is generally advisable, if conditions permit, to prescribe a restraining order of the advance guard, until the deployment of the main body can be effected.

At any rate, an action will be initiated by the parties first on the ground, and in most cases conditions and terrain will permit the gradual employment of the entire force. Extensive attacks, especially such as must pass over open ground against a strong and sufficiently manned position, proceed so rapidly in our day, as already stated, that it is always recommendable to delay the attack until all troops intended for it are in position and ready for immediate employment.

In this case the corps commander deviated from such a course because he did not consider the strength of his opponent as very great, and he had the utmost confidence in the

ability of the division commanders and his troops. He might also have been influenced by the thought that if he succeeded in quickly forcing the enemy back, a part of his corps might advance sufficiently far on the Arnau road the same day. Nevertheless, existing conditions could hardly be surveyed with sufficient clearness to count with certainty on an early victory, and it would have been better to have ordered the attack by the Second division later, or at least not before the leading brigade of the First infantry division had deployed. This time would in no wise have been lost had it been skillfully utilized in preparing the attack by artillery fire.

It has always been a desirable thing to prepare an attack by the use of artillery, while to-day it has become such a necessity that in all cases such preparation must be made in the most comprehensive manner. In like measure artillery support is needed during the action. If the superior commander precipitates his dispositions, it becomes doubtful whether a sufficient number of guns can be brought up in time; at all events, it is certain there will not be enough time available for preparation.

The corps commander, therefore, was quite right in placing a large number of guns at the disposal of the Second infantry division. An oversight not at all insignificant, however, appears in the directions given for that purpose.

The duty of division artillery is naturally to first support its own division. Corps artillery should be employed wherever it appears wise to secure a massed effect. The sphere of artillery is to fight at long distance; if we would therefore derive its full benefit, it should come into action sooner than the infantry, and consequently its whole force should, as a rule, be deployed early in the fight. For this reason corps artillery should not be assigned to the rear of a marching column, but rather as near the head as terrain and other conditions will permit. As the leading division has at its disposal a sufficient number of guns in its own artillery body to initiate an action, the corps artillery will generally be put between the two infantry divisions. If, however, it is intended to attack the enemy in a place already reconnoitered, then the mass of the artillery may be brought forward still nearer the head.

When initiating important attacks, it should be seen that corps artillery is brought up to reinforce the batteries at the front in proper time; this, however, does not apply in case the corps artillery itself is engaged in an independent action. The commander intended to pursue such a course, but at the same time he recognized that his corps was divided, and marching in two columns instead of a single column. Now, as the right wing division might also come upon the enemy in the mountain passes, its order of march was arranged so as to bring the infantry into action first. Its own batteries, kept together as much as possible, could be echeloned among the infantry; but the place for the corps artillery was at the rear of the entire column.

Should it become necessary quickly to reinforce the Second division with artillery, the batteries which could arrive most promptly would be called into service; these were the 36 guns of the Sixteenth artillery regiment of the First infantry division. Taking away its own artillery from a division is a measure that should be resorted to *only in rare cases*. We should always abide by the rule that *artillery should act only in connection with the division to which it belongs*. Here, however, the preparation and support of the impending attack could only be properly arranged by making an exceptional disposition of the artillery of the First infantry division.

On the other hand, the commander of the First infantry division would have done well to hasten his artillery regiment forward to the battle-field quite early, on his own responsibility, under cover of his cavalry regiment. It is certain that the occupation of Trautenau by the Second division was soon reported to him by his cavalry patrols, and the fire of the guns in that direction must surely have been heard, which, even if not very brisk, at least indicated that the Second division was in action, and it was impossible to foresee how events would stand an hour later. There was therefore every inducement to hasten the march as much as possible in order to reach the field of action at the earliest moment. Infantry cannot maintain a quickened pace for any length of time, but cavalry and artillery can, and it is therefore recommended to send these arms *ahead* in such cases.

Finally, let us consider the horse battery attached to the cavalry brigade. The expediency of such a permanent assignment may appear questionable. Larger masses of cavalry, such as divisions, certainly need artillery as soon as they pursue independent tasks. For purposes of reconnaissance it is absolutely necessary. On the battle-field the horse batteries remain with the cavalry, as they are indispensable for the many-sided work of the latter during and particularly after an engagement. The division commander should deliberate well before he employs his batteries in connection with the rest of the artillery.

To attain its maximum of efficiency in the case before us, the horse battery present on the field should unite its action with the division artillery regiment, and with it prepare and support the attack of the Second division. This could only be done, however, by putting it under the orders of the regimental commander. All batteries on a field of action must be under the guidance of a single superior officer.

THE SECOND INFANTRY DIVISION FROM 11:30 A. M. TO
12:45 P. M.

Lieutenant-General A——— had considered the matter of continuing the action before the corps commander arrived, so he was well posted regarding dispositions to be made when he received his order.

He first turned to the commander of the First artillery regiment, Lieutenant-Colonel J———, who was riding at his side, and said (11:55): "The division will attack the enemy before Neu-Rognitz both in front and in the flank, the flank attack being made from the direction of Alt-Rognitz. Assemble your 6 batteries under the ridge where the Second artillery battalion is now in position, and prepare the attack. I shall request the cavalry brigade to send the horse battery into position on the Galgen Mountain, where the corps artillery is also expected to join in the action in half an hour." Next he despatched an aid to the First cavalry brigade, to request the assistance of the horse battery. Then, turning to another aid, he said: "Direct the Fourth brigade to form up in Alt-Rognitz, with the left 550 yards from the church of St. Paul

and St. John, for a flank attack on Neu-Rognitz, leaving 1 battalion south of the little Kriblitz woods at my disposal. The Third brigade will advance east of the Trautenau-Königinhof road, while the artillery regiment will prepare the attack from the crest of Ridge 500. I will later give the exact time for the attack to commence. I will be found with the left wing of the artillery." The aid was required to repeat the order before riding away.

Turning to the commander of the Third infantry brigade, Major-General B——, who had overheard his conversation with the commanding general and the orders just given, he said: "Major-General B——, you know the situation, and also my intentions. Post your brigade, ready for attack, in the extended woods north of Neu-Rognitz. I will give the exact time for the attack later. I will be with the left wing of the artillery."

By 12:04 p. m. these orders were issued.

As the corps commander had no further instructions to give him, the division commander went up to Hill 500, north of Alt-Rognitz, from which he could best survey the field of attack and could assure accord in the movements of his 2 brigades. At 12:15 the division surgeon came up to him, and, after being advised briefly of the course of action planned, proposed to establish the field hospital immediately in Kriblitz, to assemble the ambulance company near the eastern exit, and to send it to Alt-Rognitz just as soon as he could do so. The general approved of these arrangements, and ordered that the troops be informed of them by mounted riflemen.

At 12 o'clock the commander of the First regiment of field artillery had received in person the verbal order of the division commander, and had then started at a gallop from Hill 504 down to the First battalion, which he found in the act of independently going into action near Hill 468 to engage the hostile artillery northwest of Neu-Rognitz. He at once put a stop to these movements, and, pointing out to the battalion commander the position of the Second battalion, directed him to lead his batteries, through the sunken road south of Hill 504, up to its right wing. The battalion formed column of pieces to the left out of line, withdrawing by battery at a trot out of range of the shrapnel with which the hostileartil-

lery had opened. The First horse battery had gone into action at a gallop on the southern slope of the Galgen Mountain just at the right time, and drew the enemy's fire upon itself. Nevertheless, some of the gunners of the First battalion were wounded and left behind. The second echelon had halted, under cover of the sunken road east of the Galgen Mountain; and followed the last battery of the battalion without being fired on by the enemy. The battalion commander had hurried forward, with his adjutant and several scouts, to meet the regimental commander with the Second battalion. In riding forward he noticed that the batteries would be forced to keep the road on account of the steepness of the hill south of Kriblitz (457). He sent a scout back to the leading battery with advice to that effect, and ordered the march to be continued, covered, behind the ridge along the little woods south of Kriblitz. On the top of this ridge, 440 yards from the right wing of the Second battalion, he found the regimental commander, who had hastened there to await him. He was then given the following order: "Put your battalion in action south of the little Kriblitz woods, and fire on the three hostile batteries located east of Neu-Rognitz, against which the Second battalion is already in action; at the same time harass the infantry in the patches of wood north of the village." The battalion commander thereupon called for his battery commanders, and assigned to them the positions shown on the plan of the engagement. When the batteries had gone into action, the limbers were taken back to the edge of the woods, and 2 ammunition-wagons were sent to each battery from the first echelon standing near by. Contrary to the general custom, all the caissons halted 440 yards on the flank, instead of in the rear of the guns, covered, north of Hill 457 and near the woods; this was due to the nature of the terrain. The hostile batteries east of Neu-Rognitz had not interfered with this movement, as they were kept busy by the Second battalion. Although the regiment had thus far used but little ammunition, and had an ample supply for $3\frac{1}{2}$ hours at the ordinary rate of fire, Lieutenant-Colonel J——— did not fail to appreciate the fact that if the battle should become fiercer on the long summer's day, it might lead to scarcity of ammunition. He accordingly sent an officer to the commander of the artillery brigade,

requesting that an artillery ammunition column be placed in readiness for the regiment at Trautenau near the exit to Raussnitz. At 12:20 p. m. the First battalion opened fire with all its batteries, evidently to the enemy's surprise.

Meanwhile the initiatory movements of the Third brigade had also commenced. When Major-General B——— had received his instructions from the division commander at 12:04 p. m., he first rode to Hill 513 (situated in the most advanced line), and dismounted behind the hill with his staff. Both his regimental commanders were ordered to this point, where they arrived at 12:10 p. m., and received the following instructions:

"The attack on the enemy's forces near Neu-Rognitz will be resumed. Corps artillery has received orders to deploy on the Galgen Mountain. The entire First regiment of field artillery will go into action on Ridge 500, which you see in the distance. The Fourth brigade will act against the right flank of the enemy, from the direction of Alt-Rognitz, while we attack his front as soon as ordered to do so by the division commander.

"Colonel D——— [First regiment], you will prepare the attack with your fire, but do not advance beyond the line now held by the Twelfth and Tenth companies. When you attack, the center of your regiment will take as march direction the northwest corner of the large woods north of Neu-Rognitz, and you will connect with the Second regiment.

"Colonel E——— [Second regiment], deploy your forces to the left of the First regiment, in a covered position; your objective will be the left wing of the same woods.

"A line separating your regiments would run from Hill 513 to the western edge of Hill 527."

The commanders thereupon returned to their respective regiments.

Colonel D——— ordered his Second battalion to fall in at once, and to deploy for the preparatory fire between Hohenbruck and the Tenth company, which was near the edge of the woods. The Third battalion likewise was directed to open fire with the 3 companies present. Near 12:30 the Ninth and Twelfth companies from the direction of the village, followed by the Fifth, Sixth, and Seventh companies, and the Tenth

company from the direction of the edge of the woods, were engaged at 900 to 1,000 yards in a brisk fire with the hostile skirmishers lying north of Neu-Rognitz. The Eighth company was lying under cover in line in the woods on Hill 509. The First battalion, under orders of the regimental commander, moved in column of march in a depression close up to Hohenbruck, where it halted under cover. The Second regiment was so posted that the Third battalion (3 companies) moved up more closely to Hill 513, thereby making room for the Second battalion, which was grouping on the same line. Both battalions had posted themselves under cover in two echelons in company columns, a few skirmishers in front, because it was not the intention for them to open fire, by reason of the great distance and the obstructed view to their front. The First battalion, in column of platoons, moved up behind the center of the two leading battalions.

The brigade commander inspected the positions of the closed subdivisions, and when the preparatory fire of the companies of the infantry regiment was heard to be steadily increasing, he directed that the ammunition in the cartridge-wagons be at once issued. This issue proceeded promptly and without difficulty in the case of the companies not under fire. The companies already partially deployed sent back men under a non-commissioned officer to the cartridge-wagons, who carried the cartridges up in bags and threw the packages to the men on the skirmish line. The latter found room for the cartridges in their haversacks and trousers and coat pockets. At 12:45 p. m. the empty cartridge-wagons were sent back to Trautenau, going east of the Hopfen Mountain. At that time Major-General B—— again returned to Hill 513.

It could be distinctly seen that the enemy occupied the foot of the line of hills from the strip of woods near the highway to the meadow situated to the east of the highway, with strong lines of skirmishers. Near the patches of woods situated to the northeast and east of Neu-Rognitz large closed bodies appeared, between which, as previously stated, 3 batteries were in position not very far from the village.

When Major-General C—— received the order that the division commander had sent by his second aid (12:08

p. m.), he was standing with the two regimental commanders between the Third and Fourth regiments.

It was a source of great satisfaction to the brigade commander that the artillery on Ridge 500 was reinforced. If the batteries on his side did not obtain a superiority over those of the enemy, the position of the densely massed Fourth infantry brigade would be endangered by shrapnel although it might be well covered. At all events, some time must elapse before the First battalion of field artillery would come up, and even after its arrival it would be out of the question to lead the brigade to Alt-Rognitz, by a flank march, over country in full view of the enemy, about $\frac{3}{4}$ mile from the hostile infantry and $1\frac{1}{2}$ miles from the hostile artillery. As a consequence Major-General C—— issued the following order:

"The attack on the enemy in position near Neu-Rognitz will be resumed. The division artillery will prepare the assault from the crest of Hill 500, the Third brigade attacking the front from the direction of Hohenbruck, the Fourth brigade attacking the flank from Alt-Rognitz. Orders for the initiation of the attack will be issued by the division commander. Colonel F—— [Third infantry] will leave 1 battalion here for use by the division commander, but will advance with the two others behind the Second battalion of artillery, and, passing Hill 530 through the woods in front of Alt-Rognitz, post the battalions on the left wing in the second line under cover. Colonel G—— [Fourth infantry] will post his regiment in such manner that it will be ready for both attack and defense in the depression of Alt-Rognitz, with a breadth of 875 yards and the right resting on Hill 425. Messages will reach me near Hill 425. Each regiment will send me 1 mounted officer."

Colonel F—— at once designated the Third battalion to pass under the direct orders of the division commander: his 3 battalion adjutants had already come up to him for instructions. The First and Second battalions of the Third infantry, in double platoon columns, were at once given orders to start without delay, proceeding in column of march along the southern edge of the Kriblitz woods and turning toward Hill 530. At that point the regimental commander, who had ridden ahead, directed 1 battalion upon each of the roads lead-

ing south toward Alt-Rognitz. The shifting of the battalions to the left wing had been effected without serious loss, as it had taken place mostly under cover; the Second battalion of the Third infantry, which was in rear of the artillery battalion, had, however, lost about 30 men by shrapnel that had reached farther than expected. At 12:45 the battalions were in single platoon columns at the southern edge of the woods north of Alt-Rognitz. (See Map V.) The commander of the Fourth infantry regiment waited until the First battalion of artillery had gone into action, and when at 12:30 the fire from the enemy's batteries appeared to slacken, he ordered the Third battalion to shift 440 yards to the left, in the bottoms near Alt-Rognitz, under cover. The Second battalion, in company column, immediately took the place of the Third near Hill 425. The First battalion advanced over open ground with the companies in column of march, but without much loss, up to and along the road leading into the center of Alt-Rognitz, and about 12:45 took up a position on the southern edge of the village to the left and alongside the Third battalion. The latter had sent forward 2 companies into the undulating ground 361, which entered into a fire fight with hostile skirmish lines at a distance of about 1,200 yards.

In the meantime the brigade commander had repaired to the northeastern corner of the thicket in front of Hill 425, where he had dismounted to observe the progress of the deployment of his brigade. When he chanced to see the division flag on the eastern hill (500), he sent his aid, on foot, up to the hill, to report the dispositions he had made. The division commander approved his dispositions, and sent word back that he would give the order to attack as soon as the 2 battalions of the Third infantry had arrived on the left wing.

At 12:45 the artillery regiment had gained a superiority of fire over the 3 hostile batteries east of Neu-Rognitz, and the hostile infantry had extended farther to the east, occupying the thickets along the wagon-road on the right wing.

Lieutenant-General A——, who had been on Hill 500 for about half an hour, sent an aid to the hussar regiment, with instructions to follow the advance of the Fourth infantry brigade, and at the same time continue to keep watch over the country between Rudersdorf and the Aupa by patrols.

He also sent a mounted rifleman with the following written order to the engineer company in Trautenau:

"The company of engineers will proceed to Hohenbruck and prepare that village for defense, especially along the highway, as soon as it will be no longer needed in Trautenau."

Another mounted rifleman was sent to the flank detachment still situated near Welhota (the Eleventh company of the First infantry, and half a troop of the Fourth squadron), with written orders to advance to Raussnitz, where they would join the division of the Guard as soon as any part of it should reach there, and take direction toward Alt-Rognitz.

COMMENTS ON THE DISPOSITIONS OF THE SECOND INFANTRY DIVISION FROM 11:30 A. M. TO 12:45 P. M.

The corps commander had already ordered that the attack be made by a turning movement. Consequently a part of the forces must be put in motion against the right flank of the enemy simultaneously with the advance against his front. In this the division was at an advantage in its being already deployed to some extent; otherwise still more time would have been lost in making preliminary movements. Only most urgent circumstances can justify a simple frontal attack. (See page 92, Part II.) The great strength of the defense compels us to combine a frontal attack with a turning movement, whenever practicable.

It is essential, however, in a successful attack of this kind, that, if possible, the turning movement remain concealed from the enemy for a long time, or else that he be held fast in front until it becomes effective. In this latter direction too much is frequently done; as a rule, we imagine the enemy can only be effectively held in his front by a more or less energetically executed attack. *This is by no means so with larger bodies of troops*; in such cases it is only necessary that the troops near the enemy be held in readiness for the attack, since, as we have previously noted, the deployed enemy is no longer in position to withdraw altogether from the action. The battle of Gravelotte and St. Privat, August 18, 1870, both in general and in detail, affords examples which cannot be too carefully considered.

How far the turning movement should extend can be foreseen only in the lesser operations of war, and when the ground can be fully surveyed. In general, it should be governed by the strength of troops available, else too great an extension may easily follow.

In the battle above mentioned it was intended to hold the enemy firmly in front until it would be possible for the left wing, wheeling around, to grasp the right flank of the French army. General headquarters was in error, however, in believing that the hostile position reached only to Amanvillers; in reality it extended beyond it to St. Privat la Montagne, and later even to Roncourt.

The village of Alt-Rognitz was assigned to the Fourth infantry brigade as the point at which to begin the turning movement. But in order to avoid a premature attack, the line beyond which it should not advance was also stated, the extension of the left wing having been fixed at about 550 yards west of the church of St. Paul and St. John. However, it could not be foreseen whether the flank attack would actually take place from that point; in the meantime the enemy could have started counter-measures, or he could have extended his right wing and placed reserves behind it. In such a case the attack of the Fourth infantry brigade would also be a frontal one.

Under any circumstances, however, the combined action of both brigades must be secured; otherwise, if the enemy should make use of the most effective counter-measure in such tactics (an offensive advance, say against the Third brigade, to annihilate it before the too distant Fourth could render assistance), the whole division might be dispersed.

In view of this it seems wise that Lieutenant-General A——— should have designated the southern exit of Alt-Rognitz as the point beyond which the Fourth brigade should not extend. From that point to the highway the distance was about a mile and a half, and would gradually become less as the two brigades advanced. Common action of the separate bodies would probably be practicable very soon.

The division commander had reserved for himself the fixing of the time for beginning the attack, as he wished first to await the effect of the artillery fire. By this he assured

the simultaneous start of both brigades. For instance, had he ordered the Third brigade to start as soon as the Fourth advanced from Alt-Rognitz, the commander of the Third brigade might be induced to lead forward his entire force at the moment single companies of the Fourth might come out for fire preparation. At a mile and a quarter from Hohenbruck, where the commander of the Third brigade had halted, it was difficult to overlook the left wing, while the operations of the Fourth brigade, in the bottoms, could not be seen at all.

It was therefore better for the division commander to have instructed the brigades not to start before he had given the orders. Everything depended on the simultaneous onset of both brigades, which must be governed by the effect of the artillery and the movements of the brigade on the left wing. As soon then as Lieutenant-General A—— selected a station from which he could oversee the deployment of the latter for attack, he was in position to chose a time for the start of the Third brigade.

The division commander proposed to use all his troops for the attack, retaining 1 battalion, however, at his disposal. We have already stated that generally an action must not be initiated without a reserve, but here we may say that as the corps commander was conducting the fight, the entire First division was a fighting reserve. For the Second division it meant a decisive attack, and therefore all its parts must be put in motion in such a manner that they may promptly participate in the action. Only absolutely necessary detachments must be made, like the company near Welhota in the valley of the Aupa. The front of the division is so extensive that the decision would come quickly, and a few battalions held in reserve far to the rear could hardly be led up in time to where they might be needed. They might arrive soon enough to support retiring forces, but to assure a victory they must repeat an attack at which a regiment or a brigade had just failed, the chances for success in which in all probability would be less than if retiring troops were merely supported. The main point is this: give the artillery plenty of time for its work; have the terrain thoroughly reconnoitered; and carefully dispose your infantry. The support of the most advanced troops is then the duty of the succeeding echelons, which must be

near enough to join in the action before hesitation in the fighting line grows to a retrograde movement. *When the time for a deciding action has arrived, and it is no longer a matter of merely initiating an attack, it is not advisable to detach a special reserve from the troops that are disposable for the attack, so long as there are already other troops in readiness for reserve duty.* The 1 battalion that the division commander retained at his disposition was to be put into action at such point of the attacking line at which a check might occur.

We should not fail to note that the reserve put in readiness by the First infantry division was very incomplete. In the act of forming up on the right flank of the line of battle, it was not in condition to afford timely relief to the left wing of the division in case it failed in the attack. In such an event it would be entirely dependent upon accident at what point Lieutenant-General A—— could rally his troops, and it would have been better had he reserved still more of his troops, so that he could render *immediate* support to the attacking troops at a decisive point.

As it was, his division for the time being was entirely dependent upon itself, and an isolated division will not do well if it attacks without a special fighting reserve.

A still greater error was seen in our battles of 1866, in that brigades or divisions advancing for a decisive attack left battalions behind in defensive positions in suitable sections of the terrain. When the object is the forcing of a decision in front, a single reserve battalion may often turn the scale; therefore, it must not be wanting. Retiring forces, on the other hand, if their power of resistance is not completely broken, will of themselves make a stand in a favorable position.

The issue of the orders by the division commander proceeded in the rotation of their importance, according to his own judgment.

First, instructions were verbally given to the commander of the artillery regiment, whose batteries must prepare the attack as long as necessary. Then came the orders to the Fourth brigade, which had to march the farthest on account of the proposed turning movement before it could join in the action. Finally he gave the orders to the Third brigade, which probably need not start for three-quarters of an hour.

If a judicious sequence in giving orders is observed in such situations, a few precious minutes may generally be gained.

The issue of a regularly arranged written division order for all parties could hardly be expected on account of the little time available. Verbal orders were accordingly issued to the various headquarters. The transmission of orders is hastened and facilitated if commanders keep up communication with their superior through staff officers. While the commander of the Third infantry brigade rode up to the division commander, the commander of the artillery had remained with Lieutenant-General A——. Major-General C—— (Fourth infantry brigade) was nearly a mile away, by reason of the situation of the combat, and his orders must be sent by one of the aids. It was very fortunate that both the regimental commanders were with Major-General C——; one of them had his battalion adjutants with him, so that the regiment (Third infantry) could transmit its orders directly to the companies. We should endeavor to issue in writing all orders for brigades or larger units; lack of time alone, as in this case, can justify an exception.

Right here we would again state that it is better to make your orders somewhat too explicit than to leave a subordinate commander without a sufficient view of the situation. With regard to the order given the commander of the artillery, it seems that the least possible was said; but the few words that were said embraced the main points necessary for the commander to know—the objective of the attack, its p'an, and the task which fell to the artillery regiment for the time being. It said explicitly, "Assemble your 6 batteries * * * and prepare the attack." It could not be inferred from this that the activity of the batteries would cease with the preparation, but rather that as soon as the infantry advanced to the attack, the artillery would receive further orders, governing its action during the fight. Nevertheless the order might have gone further and directed the regiment first to subdue the batteries east of Nen-Rognitz, and then turn its fire upon the infantry in the patches of woods north of the village.

As a rule, it is the artillery that is least informed regarding the course of affairs. "Up to the commencement of the

action the artillery commander is with the leader of the body of troops to which he is attached, and the first orders necessary for his part in the action will come from that leader. He will then take command of his troops, or at least the largest united body of them, but will keep up continuous communication with his regular commander." This is what Drill Regulations prescribe for the field artillery. If the artillery commander is not given the necessary orders or the general view, he must insist that it be done. In the case before us, however, all that was necessary had been given in the orders.

Furthermore, it was judicious to point out at the proper time, to the artillery commander, the plan of the leader of the action, and to assign his part therein. A division commander must acquire the habit of considering his 36 guns as a collective battle unit, as he does with his infantry brigades and his cavalry regiment. He would dispose of single battalions of his brigades only in exceptional cases, and he must adopt the same principle with reference to his batteries.

Judging from the course of the action up to 11:30, there was always danger that the 2 battalions of field artillery would become separated. Should such happen, it would have been doubtful whether the 3 hostile batteries east of Neu-Rognitz could have been promptly subdued, and the speedy attack that was planned would then have to be abandoned; or, if the infantry attack were nevertheless undertaken, it would be a very bloody affair and its outcome uncertain. While so separated the First battalion of artillery could hardly go into action at any other point than the Galgen Mountain, and as the Sixteenth regiment of field artillery was also to take position there, all would have been obliged to go into action at diminished intervals or in terrace formation. At all events, the position would have been a very crowded one. Furthermore, the division commander would have lost control of half his artillery; for if the First battalion remained near the Galgen Mountain, according to regulations it would pass under the command of the senior artillery commander, who in this case was the commander of the Sixteenth regiment. If the division commander should keep the 6 batteries together under his command, he could not only prepare the attack from stage to stage, but accompany

it with his artillery. It would have been still better if the artillery could have gone into action farther off on the left; it would not have been necessary then to fire over the heads of the infantry, although the latter was posted in a deep ravine. The terrain, however, did not permit this.

As for the cavalry regiment, it was directed to follow the Fourth brigade and at the same time reconnoiter with patrols the country between Rudersdorf and the Aupa. We know from experience that such an order is a rare one, and that generally an entire regiment is charged with reconnaissance. The latter course, however, does not seem to be the correct one. The engagement about to be initiated was the main object in view, and for it all forces should be put in readiness. For other purposes detachments only should be used, and these only as far as unavoidably necessary. An advance of hostile bodies between Rudersdorf and the Aupa would be in the highest degree dangerous, but there was not the last indication that such was likely to occur. All that was necessary was to take measures by which such a movement of the enemy would be discovered in time to meet it properly, for which purpose patrols would suffice, while the rest of the cavalry could be used to advantage in the action itself. It would then have been better to have given it such an order as would permit it to join in the action according to the terrain and the special conditions.

The commander of the hussar regiment interpreted his order aright in his not following directly behind the Fourth brigade, but keeping in line with its left wing at a distance of from 400 to 500 yards.

It is always necessary to secure the flanks of troops in action. But we should bear in mind that, as a rule, this can be accomplished by patrols. An observance of this principle will avoid the misuse of the cavalry regiment of a division that so often occurs in actual war, and the regiment will not be lost to its proper rôle.

THE SEVERAL PARTS OF THE DIVISION.

As for the First battalion of the First field artillery regiment, in accordance with previous arrangements it must receive its orders from Major-General B—— until it again

reverted to its regimental commander. The latter received his instructions from the division commander, in the presence of Major-General B——, on Hill 504 (south of the Hopfen Mountain), and this made it clear to Major-General B—— that he was then deprived of the command of the battalion of artillery. While the commander of the artillery regiment was receiving the orders of the division commander, the First battalion was led to seek employment which was not warranted by the circumstances. This will always happen when subordinate commanders are ambitious to achieve great results and their superiors do not understand how to restrain them. The difficulty increases when the two commanders are not sufficiently acquainted with each other, which generally happens with the commanders of the infantry and the artillery at the beginning of a war. This makes it all the more necessary that an officer should acquire perfect familiarity with the art of commanding troops.

The temptation that led the First battalion to act on its own responsibility was indeed great. Just examine, for instance, the situation before us. The enemy's shrapnel are reaching the Third infantry brigade, in consequence of which the troops suffer some losses, which cause much depression when nothing is done to subdue or divert the enemy's fire. Not far distant are 18 of our own guns, the arm that alone is capable of accomplishing such a task at long range, and yet they do not show the slightest inclination to undertake their task. Is it not natural that every one should then become impatient and exclaim, "Why do you not rid us of the hostile artillery? What are you here for?" In most cases the artillery will be put to such use, but the orders for such should come from the superior commander.

It was Major-General B——'s duty to bring the artillery into action there; or, if he no longer controlled it (as was indeed the case), then it was Lieutenant-General A——'s duty alone. Yet if the battalion should open the engagement on its own account, it might bring about a more extended action, for which, in the leader's opinion, the time had not yet arrived, or it might become engaged on the left wing while the leader needed it more urgently on the other.

Without the approval of the commander of the Third brigade, under whom the battalion still remained, it should not, under the circumstances, take post on Hill 468 (southeast of the Galgen Mountain) and open fire. Inquiry of the brigade commander would not have offended the latter, even though he might not have especially recommended inquiries, for the right to ask if one may act with troops under one's command will be granted by every commander to the leader of an independent subdivision under his orders. Abrupt answers, however, should always be avoided on the part of superiors, as they stifle independent thought and create indifference in subordinates.

As already stated, the regimental commander prevented the leader of the First battalion from carrying out his intention to bring his battalion independently into fire on the right wing. At first the batteries may not have comprehended the meaning of this order, and thought it strange they should not be permitted to silence a hostile battery when they could easily do so. But from their standpoint they could not perceive the general purpose of the engagement, nor did they know that soon the Sixteenth regiment would take their place and they would be assigned work on the left wing.

The evacuation of a position a mile and a half from the enemy ought certainly to be avoided, no less than the losses resulting from a flank march, but in this case the hostile battery did not have the range, and the distance of the flank march was not much over 200 yards, which could be quickly covered at a gallop. At all events, this temporary unpleasant situation was for the purpose of applying the rule to deploy from the start a superiority of guns in one place, so as to secure their combined effect early. The fire was to be directed on the hostile artillery, the batteries east of Neu-Rognitz. The position south of the little Kriblitz woods assigned the First battalion was almost a mile and two-thirds from the enemy's batteries. This is a favorable distance for effect and observation, although guns have a much greater range. The opportunity of observing the position of the opponent and the effect of fire decreases materially with longer distances. The position chosen for the First battalion had the further advantage of being able to reach the right wing of the enemy with a

flanking fire. The entire artillery regiment had an extensive field of fire, which was almost everywhere open. It was also in a position to establish a line of fire at right angles to the front. There was ample room for the 6 batteries, each battery having a space 100 yards wide, and the interval between guns need not be shortened. The distance of 200 yards between the 2 battalions was caused by the terrain, and in no wise interfered with the supervision of fire. It was indeed impossible to sweep the ground at short distance, as the slope to the southwest was very steep and the country in front could not be seen. As it was, however, the danger of attack by hostile infantry was very remote; our infantry was massed in front of the artillery, and the division commander had reserved the Third battalion of the Third infantry for emergencies.

Placing the guns behind the crest of Ridge 500-547, with the muzzles above the ridge, was a wise measure. It is true the enemy was assisted in determining his own range and observing the effects of his own fire by the artillery regiment having been placed near the southern point of the little Kriblitz woods, but this was a measure that could not be avoided; while, on the other hand, the dark background formed by the pines (especially so with the First battalion) made it difficult for the enemy to obtain a good aim on the ground in front where the batteries were stationed.

The position of the First battalion had been reconnoitered and designated by the regimental commander. The battalion commander quickly perceived that for his batteries to stand at right angle to the front, they must be echeloned to the right and rear at distances of 50 to 60 yards; a formation, however, which would not interfere with the supervision of fire. The First battalion was certainly poorly located for an eventual retreat. But there need hardly be any fear of this, and the battalion could be withdrawn to the east or west, going around the little Kriblitz woods. The advance of the Second battalion in line to the fire position was a simple movement; the battalion was fired upon but little, and the advance could be made under cover. With the First battalion the position of each battery commander had to be designated, not alone on account of the echelon formation and the steepness of the slope, but also because Hill 460 obstructed the view to a

certain extent, as it lay between the position and the enemy. On account of the mountainous terrane, the batteries moved into position at a walk, and unlimbered toward the right flank. The First battery, on the right wing, was forced to carefully select a position for each gun, because of the hills in front, and therefore its chiefs of pieces advanced on foot. As stated, the First battalion opened fire at 12:20. Special measures had to be adopted at once to lessen the recoil of the pieces.

While the Second battalion had contested a fully equal artillery without a decided success since 11:30, the First battalion could expect to reach a decision very soon if no new hostile batteries appeared. It seems the enemy had not observed it go into position, and the sudden opening of fire by this superior artillery must have made a strong impression.

The division commander had designated the purpose of the action—the attack on the enemy before Neu-Rognitz. To make this attack, it was first necessary to drive away or subdue the batteries east of the village. It was therefore entirely proper that the right and center batteries (First and Second respectively) of the First battalion should be ordered to open on the hostile artillery with increased rapidity. The center battery was instructed to get the range, although the distance could be reasonably well determined by the map. The task of the battery on the right wing was difficult. In the first place, its position was in the neighborhood of Contour 450, while the opposing batteries occupied positions between Contours 450 and 500; furthermore, some intervening wooded hills forced the battery chief to use indirect fire. The left wing battery (Third) was directed to fire on the hostile infantry in the patch of woods north of Neu-Rognitz. As it stood on Hill 475, it could overlook the hostile position tolerably well, and took the entire skirmish line between the highway and the northern footpath under fire, as well as the troops in close order in the edge of the larger piece of woods.

The commander of the First battalion sent an assistant observer and three mounted orderlies to Hill 513. After several rounds of shrapnel with percussion fuse, in order to fix the distance, the batteries proceeded to use shrapnel with time fuse. The First battalion fired quite briskly with 2 batteries, about 6 shots per minute, while the Third battery, firing on

the infantry, limited itself to ordinary fire (about 4 shots per minute). The men stood near the guns in the First battalion, as up to that time they had received no hostile fire; those of the Second battalion, on the contrary, who had already been for some time under a damaging fire, kneeled down in order to lessen their losses.

Firing over their own infantry could not be avoided. However, this only occurred with the left wing of the Second infantry regiment.

The horse battery on the southern slope of the Galgen Mountain had come under the command of Lieutenant-Colonel J——, according to orders issued; but as it was quite distant, and had a separate task, and as the commander of the Sixteenth regiment of field artillery might arrive there at any moment, it was left independent. It was no easy matter for the horse battery to hold its own against the hostile battery standing under cover on Hill 569, east of Sorge. The former was completely in the open, aslant on the hill, and considerably lower.

The important question of replenishing the ammunition was easy of solution for the Second battalion. The battery commanders had brought 3 ammunition-wagons up to each battery. The first echelon was placed under cover on the right wing behind Hill 500, next to its limbers, which had been sent back. The battalion commander had the caissons halt in the ravine north of Hill 504, and brought 3 ammunition-wagons for each battery up to the first echelon. The dispositions of the First battalion in this connection have already been described.

From the above it is seen that a special support is just as rarely attached to artillery in action as on the march. (See Part I., page 28.) While in the act of preparing and supporting an attack to be undertaken by the other arms, batteries will generally take position in the vicinity; but it is the duty of all arms to hasten to the assistance of a battery when the latter is endangered. One of Blücher's general orders threatened with court-martial any battalion or regiment of cavalry that did not hasten to the defense of a threatened battery and thereby lose at least half its men. This feeling of true brotherhood in arms must prevail in any army, and the Ger-

man troops have given splendid evidence of it in the last campaign. It was this spirit that prompted Von Hindenburg's squadron of the Second regiment of dragoons of the Guard to throw itself upon far superior cavalry at Vionville and Mars la Tour on the 16th of August, 1870, in order to save Von der Planitz's horse battery of the Guard. The same spirit also led the fusilier battalion of the Eighty-fifth regiment to advance past the batteries of the Ninth corps on the 18th of August, 1870, but it left its commander (Major Wolff von Goltentow), 10 officers, and 370 men lying on the field.

Many such instances may be cited both on our own side and that of our opponents during the campaigns of 1866 and of 1870-71.

It will therefore only be necessary to send special bodies of troops for the temporary protection of batteries when protection is not assured by the general dispositions. In the example before us, bodies of troops were everywhere near the various artillery battalions, ready in case of danger to hasten to their support at the proper time. It would have been entirely useless to charge single companies especially with this duty, for in case of change of position the accelerated gait of the artillery would make it impossible for them to follow the batteries and they would be lost also to the infantry fight. But if a battery comes into a situation where it must take a position apparently not sufficiently secured by the deployment of other troops, then the commander-in-chief must provide for its safety. If the commander-in-chief is not present, the artillery should request the nearest body of troops to provide its cover; such a request will always be promptly complied with—at least it is the duty of troops to do so as far as they are able.

In the Third infantry brigade Major-General B—— had the regimental commanders called up, to give them the final order for attack at a moment's notice, from a point where the entire battle-field could be surveyed. There is more necessary to-day than ever, as the accuracy and long range of fire-arms demand very cautious dispositions, and especially a thorough utilization of the ground. This applies, however, not only to the superior commanders, but also to leaders of smaller subdivisions. In order to issue orders in this manner, ample time must be allowed, but in the heat of action the matter is,

unfortunately, completely overlooked. When a superior commander has carefully considered everything and formed his decisions, he usually desires to have them executed at once, and then nothing proceeds quickly enough for him. Let him only consider how much time he himself required for mature reflection, and that as much time is needed by his subordinates. This applies even to the simplest situation, such as an advance over open terrane, and is indeed the habitual practice on the drill-ground. But a battle-field is usually different from a drill-ground; here each small undulation, each ditch, each bush possesses a special utility, and companies and battalions must make use of the advantage inherent in such features. Therefore the more a leader can study his situation beforehand the better able will he be to profit by the terrane.

Our engagements of 1870-71 furnish many evidences that no attention has been given to this. Regiments, even brigades, stood for a long time in one place, the commanders studying how best to attack the enemy in their front as soon as the order was received. The order came, but it was to "wheel to the right and advance at once to the attack," an entirely different direction from that prepared for. The commander then immediately went about instructing his subordinate leaders, but at the same moment a second aid arrived from headquarters, then a third, saying: "The brigade must hurry; the brigade must move without delay. His Excellency directs me to ask why the brigade has not yet attacked." Patience was then entirely lost, and every subdivision advanced against the enemy by the shortest route. But the shortest way is rarely the best. Tremendous losses, the breaking up of the various units, hesitation, and failure of the attack are the consequences of an advance which, had it been quietly considered and calmly initiated, might have had a happy result with small sacrifices.

Doubtless conditions will frequently necessitate troops going into action as quickly as possible, but wherever it is at all practicable (*and this will be the rule with larger masses*), it is better to give time, so the subordinate commanders may be instructed with regard to the situation, and orient themselves. In this way alone will it be possible to even partially reduce these exceedingly large losses.

The more a mass acts as a unit, the more must the independence of subordinate leaders naturally diminish. So here we see the brigade commander not alone ordering the direction to be taken by the different regiments and the lines of connection and separation, but also starting the infantry fire preparation in one regiment while the other was directed to remain under cover. The order for attack could be given immediately, with the exception of the time for the onset, as the conditions for the brigade were simple, and for the attack in front different orders could hardly be expected. But all the more must care be taken not to allow the planned fire preparation to turn into the real attack, through the action of some over-zealous and energetic subordinate leader.

In the First infantry regiment, the Third battalion was divided by the insertion of the Second battalion. The Tenth company remained isolated on the left wing. This mixing up, however, could not be avoided, unless the various companies had been forced to execute a flank movement under hostile fire, which is an exceedingly hazardous maneuver.

The fire preparation for an attack is mainly done by artillery. Infantry must, however, assist against smaller targets at mid range, with its long-range rifle and good musketry training. Six companies of the first infantry engaged in the preparatory fire action on a line about 650 yards long. This was done to obstruct the enemy's receiving reinforcements and shifting his troops, and also to gradually wear him out. The Twelfth company, only 800 yards from the hostile skirmishers, established itself as well as it could in the most southerly farm-buildings of Hohenbruck, while the Ninth company, in order to avoid the enemy's well-placed shots, was lying in a deep furrow on a field a few paces from the southern edge of the village and 1000 yards from the enemy. Pursuant to orders, the Second battalion lay somewhat in rear of the line, the Seventh company with its skirmishers in the edge of the woods; the Fifth and Sixth companies came out of the timber and moved slightly forward, because the edge of the woods lay diagonally to the front and made too good a target for the hostile skirmishers. These companies jointly deployed 2 platoons of their own accord. In view of the good musketry training, success depended mainly on cor-

rectly estimating the distances and accuracy of fire. And as the enemy's men were invisible, the aim was directed upon certain landmarks.

The Second infantry regiment had to desist from a fire preparation, as its most advanced line was over 1,100 yards from the enemy's skirmish line, and the terrain covered them from sight in many places. The breadth of the attack of the Third brigade was in accordance with regulations (a little over 1,100 yards). Each regiment brought two battalions into the first line, the Second infantry regiment having, however, formed decidedly more deeply.

The thing for the Fourth infantry brigade to do was to post its battalions as much as possible out of sight of the enemy, for the flank attack. The more sudden a flank attack is made, the more effective will it be. The sooner we show our troops to the enemy or allow him to see them, the easier it becomes for him to concert counter-measures and weaken the effect of the assault.

The Fourth brigade was in a disadvantageous position, as it must execute a flank march directly into Alt-Rognitz, under the eyes of the enemy standing on the heights. The brigade commander resolved to avoid the flank march as much as possible. According to tactical principles, the flank march should have been inaugurated from a distance; but, unfortunately, it was no longer possible to bring about this advantageous condition. Major-General C—— must therefore help himself as best he could. Consequently he did not hesitate in making a detour with the First and Second battalions of the Third regiment, bringing them around behind the Second battalion of artillery. By so doing he unconsciously thwarted the intentions of the division commander to attack quickly. There was, however, still plenty of time for a sudden attack, for when Major-General C—— gave his orders, the First battalion of artillery had not yet gone into position, and the latter would have to be in action for at least half an hour before complete superiority could be attained. Long before that time the 2 battalions of the Third regiment could have arrived upon the left wing.

Pursuant to orders, the commander of the Fourth regiment did send his Third and First battalions directly into Alt-

Rognitz by the shortest route. The Third battalion could move into the village under cover of the sunken road; the First battalion advanced 300 yards in the open, offering its right flank to the batteries, but without serious loss, as the hostile artillery at that time was hardly able to ward off the fire of the batteries. There was unquestionably some danger inherent in the movements of the Fourth brigade, in that the enemy might advance to a counter-attack, which is the best measure to prevent a turning movement. In view of the evident weakness of the enemy, this danger was very remote, and even if he did adopt such tactics, he could be opposed with a sufficient force. The Third battalion of the Fourth infantry was in the front line, ready to wheel in at any moment; the Second battalion was 200 yards in rear of its right wing, echeloned to the right; the First battalion could be drawn immediately into the fighting line at any moment, while still *en route* to the village. The best protection was, however, afforded by the 6 batteries of artillery, whose shrapnel could nip any counter-attack in the bud. The security of the entire movement depended mainly on the fact that the enemy's advance would not find the brigade unprepared. Accordingly the general selected a station that afforded him a complete survey of the country in front. From the eastern slope of Hill 425 every offensive movement of the enemy could be discovered at once, and the necessary orders to meet same could be given in time. Besides, this station eminently satisfied all other demands upon it. From it the movements of the general's own troops, as well as the entire front of the Third brigade, could be overlooked, and the Second battalion, which was designated to advance at once in case of an emergency, stood at the foot of the hill ready for any call.

The enemy could be easily aroused to activity by the fire fight commenced at 1,100 yards by the 2 companies of the Third battalion pushed out from the village, and furthermore, the fire of 2 companies at such a distance could hardly accomplish much; accordingly this movement would better have been omitted.

It is strange that the commander of the Fourth brigade gave only the orders for the deployment, and not for the attack. In this he was nevertheless certainly correct; for, in

the first place, the troops were not yet in position to attack, and, in the second place, the position of the enemy might change considerably before they got that far. With a view to giving the order for attack, he had directed that one mounted officer report to him from each regiment.

Not so satisfactory, from a general standpoint, were the arrangements for the care of the wounded. The main dressing station at the eastern end of Kriblitz was too far to the rear. The wounded must drag themselves over the crest of Ridge 500. But the absolute necessity for having water near at hand admitted of no other choice. Contrary to general practice, the division surgeon ordered that all physicians should remain on the fighting line, and he had a large dressing station established for each brigade, one in Hohenbruck and the other under cover in the western part of Alt-Rognitz and under the supervision of the senior sanitary officer of the brigades. The second field hospital found a position in Kriblitz that satisfied all demands upon it.

ATTACK OF THE SECOND INFANTRY DIVISION.

(12:45 TO 1:45 P. M.)

At 12:15 the division commander reached Hill 500 on the left wing of the Second battalion of artillery, from which point he was able to watch the movements of the Fourth infantry brigade. Parts of the Second infantry regiment could be seen in the uneven, covered ground east of Hill 513. Infantry fire was heard in the direction of Hohenbruck, but the field-glass revealed no troops on the slope south of that village, though the slope was plainly visible. It could be assumed from this that the right wing of the Third brigade was engaged at long distance in preparing the attack with infantry fire. This fire had commenced at about 12:30, and now, 15 minutes later, several companies joined in the fire from Hill 361, near Alt-Rognitz. The division commander could not be sure that his fire would prove a staggering blow to the enemy. But the effect of the artillery on the opponent was far more evident. For nearly half an hour 5 batteries of the First regiment of field artillery had shelled 3 hostile batteries near Neu-Rognitz. Although they still replied, their fire was

perceptibly slackened, and in the opinion of the artillery commander it was only a question of a short time when the hostile batteries would be completely silenced. Several of the enemy's guns were already seen to be out of the fight.

From what he saw, Lieutenant-General A——— was confirmed in his view that the enemy intended to offer a stubborn resistance at Neu-Rognitz in spite of his evident inferiority; but he considered the Second infantry division sufficiently strong to break the resistance. In view of the character of the ground, so favorable to the opponent, an immediate attack and assault by the infantry would have been hazardous; he therefore resolved to further prepare the enemy's condition for assault by continuous artillery fire, assisted by mid-range infantry fire. The left battery (Third) of the First battalion had already directed its fire on the center of the infantry position, in consequence of which the hostile skirmishers had disappeared seeking shelter; bodies in close order had also moved back from the northern edge of the large section of woods north of Neu-Rognitz. An evacuation of his position was, however, out of question with the enemy. On the contrary, he had materially extended his right wing, so that the flanking attack planned was more likely to turn into a frontal one.

A division staff officer was charged with the continuous observation of the enemy's movements with a field-glass. In company with him and the general staff officer, the division commander, having meanwhile dismounted, proceeded to view the surrounding country, as it was impracticable to make a reconnaissance, on account of the little time available.

South of Hohenbruck the country rose gradually, becoming suddenly more steep near the village of Neu-Rognitz. The narrow strip of woods along the highway afforded the enemy a good point of support, and for this reason the right wing of the Third brigade would find it difficult to advance over rising ground without shelter. The ground east of Hill 527 was, however, very advantageous; from the position of the Second regiment up to Neu-Rognitz the ridge was cut up by gullies. There all battalions could find shelter, every 200 or 300 yards, behind undulations of the ground. The field of attack of the Fourth brigade was less favorable. A long mountain spur extended from Hill 527 to the gap between

Alt-Rognitz and Rudersdorf. Although during the first part of the ascent the spur would offer effective protection against the enemy's fire by reason of its sloping to the southeast, on the top every assailant would be exposed to a fire at 550 to 750 yards range without any cover; besides, the deeply cut ravine extending from Rudersdorf to Hill 527 must be crossed.

From his survey of the ground the division commander judged that the left wing of the Third brigade had the best prospect of bringing the attack rapidly up to the enemy and thereby carrying along the extreme wing; in addition, the desired point of penetration (the bend in the enemy's line) was situated directly opposite this wing. For an effective flank movement it was necessary to let the 2 battalions of the Third infantry regiment participate in the assault in the first line, which could be done without hesitation, as so far not the slightest indication of any threatening of the left wing had been reported.

At 12:45 the division commander called Lieutenant-Colonel J——, of the artillery, up to him (he was then near by), and said: "I shall now order the infantry to begin the fire-preparation and decisive attack on the enemy's position. The point of penetration is the northern edge of the large section of woods over there to the north of Neu-Rognitz." An aid was sent to the commander of the Third brigade, with orders for the brigade to open its attack by fire and then assault, taking the edge of the above-mentioned woods as the point of penetration. The brigade commander was advised that the Fourth brigade would conform to the movements of the Third. After a quarter of an hour, Major-General B—— was found near Hill 513; he had been obliged to dismount a number of times and lead his horse himself on the abrupt slopes, as he had neglected to bring along a mounted rifleman. The brigade commander had failed to advise the division of his station and the dispositions he had made.

The ranking aid had been sent on foot to the commander of the Fourth infantry brigade, Major-General C——, on Hill 425, with orders to make the decisive attack by extend-

ing its left wing to the wagon-road,¹ after the entire brigade had first prepared for the attack by infantry fire on conjunction with the left wing of the Third brigade, which would assault the eastern part of the woods above mentioned.

Toward 1:15 the division commander noticed long lines of skirmishers deploying in front of the Third brigade. They lay down, right wing at the southern exit of Hohenbruck, and left wing near the road, Hill 527-northwestern exit of Alt-Rognitz. The skirmishers of the Fourth brigade were climbing up the slope south of Alt-Rognitz. Four batteries had opened fire on the hostile infantry. The attack was therefore progressing, and the division commander brought his single reserve battalion into the sunken road east of Hill 460.

THE ARTILLERY FROM 12:45 TO 1:45 P. M.

Drill Regulations would require the commander of the First artillery regiment (Lieutenant-Colonel J——), after receiving the order to attack, to direct an overwhelming fire on the part of the enemy's position it was proposed to assault. The eastern half of the northern edge of the large woods was assigned him as the line of penetration. Since the hostile pieces continued their fire, although at longer intervals, it seemed necessary to leave 2 batteries to keep up the artillery duel; accordingly the First battery, which was on the right wing of the First battalion and using indirect fire, and the Fourth battery, which was on the right wing of the Second battalion, were left to contend with the enemy's artillery. As regards the enemy's infantry line, the regimental commander concluded that a flank attack would be best. As the Third battery had been firing on the infantry for some time, it was proper that it should not be withdrawn for other employment; the adjoining battery could engage with it, still taking the hostile infantry as a target. The Fifth and Sixth batteries would then best act on the flank, as far as practicable. At 1 p. m.

¹By "wagon-road" will be understood the road leading from the church of St. Paul and St. John to the southern end of Neu-Rognitz; by "southern foot-path," the path entering the village a short distance in front of the wagon-road; by "northern foot-path," the path entering the center of the village and passing the little thickets.

the Second, Third, Fifth, and Sixth batteries had the range of the hostile skirmish lines, which were lying down between Peak 451 and the northern foot-path. At least 16 shrapnel per minute struck this 900-yard line. A landmark was designated to each battery, so that each could shell a separate section of the line.

While carrying out his dispositions Lieutenant-Colonel J—— could not help perceiving that an advance of single batteries out of this position to accompany the attack would be fraught with great difficulties. The slope of the ridge on the side toward the enemy was steep, and the terrain so badly tangled that a timely participation in the assault became doubtful. Lieutenant-Colonel J—— consequently resolved to keep the regiment for the time in action in the position it had taken. However, he sent an officer to the horse battery on the Galgen Mountain, requesting that it later advance beyond Hohenbruck and join in the infantry attack. The officer found this battery at about 1 p. m., but not in a very encouraging condition; the opposing hostile battery had inflicted considerable damage upon it, and it was not advisable to abandon the ground in front of it. The officer thereupon rode on farther to the advance guard of the First infantry division, so as to bring up artillery support from there.

THE THIRD INFANTRY BRIGADE FROM 12:45 TO 1:45 P. M.

Major-General B——, commanding the Third brigade, had gone beyond the division commander's orders in his dispositions, in that he opened infantry fire at about 1,100 yards. He had overstepped the order received at 11:55 a. m., and actually commenced the fire fight while only preparation for the attack was demanded. But the situation of various parts of the First infantry regiment at that time was such that they must come into fighting touch with the hostile infantry; if left alone, they must suffer severely or be forced to retire. The Ninth and Twelfth companies could certainly not maintain themselves under the fire of strong hostile skirmish lines for any length of time in the southern edge of Hohenbruck, neither could the Tenth company at the edge of the woods near Hill 513. The Second battalion of the same regiment had been sent in for their support.

Shortly after 1 p. m. the commander of the First infantry regiment, Colonel D——, received from one of the brigade aids the order to attack in connection with the Second infantry regiment. No further instructions were given in the order, as the first order to prepare for the attack had exhaustively indicated the direction of the attack and the line of separation from the Second infantry regiment. All further dispositions were the concern of Colonel D—— alone. The latter was standing near the eastern boundary of Hohenbruck, close to the Fifth company, somewhat sheltered from the enemy's fire, where he could see how little protection the regiment would find in the terrane during the attack. He resolved to make up for the lack of cover by a strong development of fire, and to send forward dense skirmish lines, though the latter was contrary to custom. The commander of the Third battalion was near him, and he turned and gave the following verbal order: "I shall have the regiment advance to the line of the Twelfth company, for a decisive fire preparation. The center of the Second battalion, to which the Tenth company will be attached, will take the point of direction upon the projecting point of the woods east of the highway." This point of direction was somewhat different from that ordered by the brigade commander, due to the fact that the northwest corner of the woods was not visible from Hohenbruck. The regimental adjutant was promptly sent to the commander of the Second battalion with the order to advance the battalion in dense skirmish line, taking along the Tenth company, up to the line of the Twelfth company, and give it the point of direction. He found the battalion commander with the Eighth company, and after delivering his message, hastened away to the First battalion, to which he verbally transmitted the following order: "The regiment will advance to the attack, the First battalion following the right wing through Hohenbruck."

At 1:10 p. m. these orders had reached the respective commanders, and the Fifth, Sixth, and Seventh companies simultaneously arose to advance 200 yards, after the skirmish line had been closed until man touched man. Although the Ninth and Twelfth companies poured in a very brisk fire, the skirmishers of the 3 companies advancing without cover suffered heavy loss, and tried to get forward in double time upon

line with the Twelfth company. The Tenth company, on the left wing, hardly lost a man, as it was protected by the projecting Hill 527. At 1:15 the skirmish line of the Second battalion had thrown itself down, and the Fifth and Sixth companies each had deployed 2 platoons, while the Seventh company, for want of room, only 1 platoon. A line of 330 yards was available for the skirmishers of the battalion, and the 5 deployed platoons, of 70 men each, were about sufficient to fill this interval. Meanwhile the increasing losses compelled the companies to deploy new skirmishers, so that only half a platoon each of the Fifth and Sixth companies remained in close order, and an entire platoon of the Seventh company. These lay down near the edge of the woods 200 yards in rear of the skirmishers, where they met with only small losses, as the opponent directed his fire with considerable accuracy on the skirmish line itself. The Eighth company halted to take proper distance.

The fire of the Second battalion skirmishers became somewhat irregular after they had lain down. Casualties among platoon and section leaders had a bad influence on the transmission of orders; after a rush the men would have to find the range themselves, and then only after they had stopped to get their breath. Frequently platoon leaders were obliged to interfere for the purpose of putting an end to too rapid firing. With the help of the section leaders, the men were compelled to resort to a slow, well-aimed fire, averaging for each skirmisher 1 cartridge a minute. Even the most excited man would soon be glad to moderate his unsystematic fire when his right hand became tired. Uniformity in raising sights had been assured throughout the ranks. Nearly all platoon leaders, with the help of the skirmishers and section leaders, had fixed distances at 750 yards; only a few platoons fired at the projecting strip of woods, with sights at 650 yards. Wherever sights were improperly fixed through the inexperience of platoon leaders, company commanders interfered; the latter were generally in the center of their skirmish line, lying prone; only the commander of the Seventh company remained with his platoon that was in close order.

It was difficult to observe the effect of the fire. The enemy occupied higher ground, and the heads of his skirmishi-

ers could hardly be seen, and, although the ground was dry in consequence of a long spell of hot weather, ricochets were invisible, as they occurred in clover-fields and along the edge of the woods, where the opponent's skirmishers were located. As the guns became heated, the men fired at the 750-yard distances with sights at 700 yards. Part of the men lying down could not see their targets. It required much energy on the part of their superiors to induce them to rise on their knees, to obtain a good aim. Many fired lying down, without even aiming or looking up, especially where section leaders were lacking; but most of these were soon brought to their proper senses by the examples of their braver comrades. Some infantrymen started to carry wounded to the rear, and as they arose from the skirmish line many of them fell under the enemy's missiles; others the file-closers reminded of their duty to remain on the firing line.

At the beginning of the action 4 assistant litter-bearers were detailed from each company, who, in accordance with regulations, placed a red band around their left upper arm; this did not, however, put them under the protection of the Geneva convention. On account of the enemy's fire, these bearers could not reach the advanced skirmish lines, and so confined themselves to picking up wounded further to the rear. When their wounds were slight, many of the skirmishers fighting in front used the first-aid packets sewed inside the front of the left skirt of their coats.

The commander of the Second battalion of the First regiment of infantry watched the brisk fire of the skirmishers in anxiety. Although the entire contents of the ammunition-wagons had been issued to the men, a shortness of cartridges might be apprehended in 1 or 2 hours, if the present rate of expenditure continued. But, as already stated, the fire soon became more steady. Cartridges were taken from the numerous wounded and killed. Nevertheless the battalion commander, of his own accord, despatched a mounted rifleman to Trautenau, to the advance guard of the First infantry division, requesting that some ammunition-wagons be sent forward.

At 1:15 the entire Third battalion joined in the attack, the Second battalion having just begun the fight under which it suffered such heavy losses. In order to obtain better results

from its fire, the Ninth company advanced on line with the Twelfth, and had to work hard to resist the fire of the enemy. The commander of the Third battalion had arrived too late to stop this advance, as he had intended to do, thinking it necessary to continue the occupation of Hohenbruck. Fortunately, however, the engineer company arrived at that village from Trautenau, to prepare it for defense. Several companies of the First battalion also entered the northern outskirts of the place. The Tenth company, on the left wing of the Second battalion, occupied the most advantageous position, as compared with the others. The projecting Hill 527 limited the breadth of the field of fire very much, and the losses were hardly worth mentioning. At the command of its leader the company arose, in order to occupy the little woods on Hill 527, but it had to give up the attempt after advancing 100 yards, as, under the undiminished hits of the hostile missiles, it was followed by none of the Second battalion, the commander of which had positively prohibited a continuance of the forward movement on account of the peculiar situation. Left to itself at the southern edge of thicket 527, the Tenth company would have been simply shot to pieces. If other companies had joined in this purposeless charge, without sufficient fire preparation, the attack, difficult as it already was, would have failed in its very inception. Had the Tenth company been fighting by itself, the fact that it could see nothing of the enemy would naturally have been an incentive to find a better fire zone to the front; as a part of a larger aggregation of troops, however, it must conform to the whole, and must not, by individual action, imperil the conduct of the engagement or its success.

The First battalion had orders to follow behind the right wing. Later it was directed to pass through Hohenbruck, and was most favorably posted for this purpose in the sunken road, formed in column of march. In order to establish a good survey, the battalion commander had ridden ahead at full speed to the southern exit of the village; there he had lost his horse by a shrapnel, and, hurrying back to meet his battalion, ordered the companies to move up to the southern border of the village on four different streets. The First and Second companies, deployed as skirmishers (see Map VI.).

joined or extended the skirmish line, as soon as they observed the Ninth company break down under the hostile fire. Through the efforts of the platoon commanders the mixed platoons were rearranged and order established. Some men left back in the village were assembled and led to the front.

The regimental commander had met the battalion commander on the highway in the village and received his report relative to the independent interference of the First and Second companies. He could not fail to see that the situation of the regiment was critical. Eight of the eleven companies available were entirely deployed on the foremost line. The right wing had no natural support; it therefore appeared absolutely necessary to leave the Third and Fourth companies behind it in close order. Although the arrival of the leading subdivisions of the First infantry division was expected within half an hour, the wing must be protected in the meantime against an attack by the enemy. The Third and Fourth companies were consequently posted in Hohenbruck west of the highway, and remained at the disposal of the regimental commander.

This was the situation of the First infantry regiment at 1:45 p. m. It became still more serious when a hostile battery began to fire on the skirmish line from the direction of the quarry. By itself the regiment was hardly able to make the attack. It must simply wait, under heavy losses, for the more fortunate advance of the adjoining regiment or the interference of the First infantry division.

The commander of the Second infantry regiment remained in a sheltered position near his brigade commander behind Hill 513. After receipt of the division order at 1 p. m., no further orders were given to Colonel E—— by Major-General B——, except the order to start. The line of penetration desired by division headquarters (the eastern part of the northern edge of the large woods) and the point of direction given the brigade (for the left wing the northeastern corner of this section of woods) were in exact conformity. The line of separation for the First regiment (page 166) was known. Further instructions were therefore unnecessary, as the Seventh company had already started upon this point of direction, and the Third battalion had been ordered to seek

connection to the left. Each of the four companies on the most advanced line deployed one or two platoons sheltered in the woods, as space would permit, or reinforced to like extent the weak skirmish line in front. This entire line suddenly emerged from the woods, and up to 1,100 yards suffered, no serious losses. As the losses increased, however, the skirmishers advanced at double time, reaching the gully in front of the declivity, which withdrew the greater part of them from the enemy's sight. In order to fire, they advanced at a walk far enough to reach an open field, which they found at about 800 yards from the enemy, a portion stationing themselves in the southern border of a little fir plantation. As soon as the skirmishers lay down, the parts of the companies in front that were in close order followed, and suffered little loss, as the enemy was fully occupied by the fire of the skirmishers. At a sign from the battalion commanders, the supports quickly deployed forward and carried the entire line ahead another 100 yards, so that at 1:30 p. m., at a distance of 700 yards, with the right on line with the Tenth company and the left on a slope projecting eastward, the line had entered into such a decisive fire with the enemy that the actual attack could break forth at any moment.

Meanwhile such company leaders as were not wounded did their best to restrain the fighting ardor of their men, so as to await the approach of the companies of the second line (Eleventh, Sixth, and Eighth), and the formation of the First battalion for attack. The latter had begun to move at the beginning of the attack, having till that time rested in column of platoons near Hill 460; it crossed the difficult terrane in line of companies in columns of march. In this way they could get over the ground much better; the heads too could be quickly turned in the right direction, and at the southern edge of the patch of woods east of Hill 513 it was found that the battalion had inclined too far toward Alt-Rognitz.

In the gully the companies posted themselves on one line. Major-General B——— had instructed the battalion to advance only on his order. Any pushing forward of the closed bodies, in his opinion, must lead to the assault, which he, together with Colonel E———, who was now severely wounded, had aimed to delay until the Fourth infantry bri-

gade was ready for the charge. A glance at the condition in which the First infantry regiment was situated did not promise an effective advance from that direction.

In a space 480 yards wide and 430 yards deep, with its parts in close order and lying down mostly sheltered, but under a heavy skirmish fire 700 yards from the enemy, the Second infantry regiment held itself in readiness for the charge at any moment. In the meantime the Tenth company had come up and attached itself to the First battalion.

After an hour's firing, the four deployed companies farthest to the front had hardly succeeded in shaking the enemy, while the artillery fire had accomplished its desired result in a brief period, its shrapnel having wrought disorder in the hostile skirmish lines within 45 minutes. It was therefore with confidence that Major-General B—— could reckon on the success of the assault when he saw the right wing of the Fourth infantry brigade ascending the slope of the undulation near the heights running along Alt-Rognitz. (See Map VI.)

THE FOURTH INFANTRY BRIGADE FROM 12:45 TO 1:45.

At 12:50 p. m. the senior aid of the division handed Major-General C——, commanding the Fourth infantry brigade, the order to make the decisive attack in conjunction with the left wing of the Third brigade, after preparation by infantry fire and extending his own left to the wagon-road.

We know that Major-General C—— had not yet given the order for attack, and had taken time to understand perfectly the intentions and positions of the enemy. From the little woods on Hill 425, at the northwestern exit of Alt-Rognitz, he could clearly overlook the right wing of the enemy, and noticed that the hostile forces extended beyond the wagon-road. The enemy's skirmishers lay close to the ground and fired with smokeless powder, but as far as he could see they were occupying the patch of woods east of Neu-Rognitz, establishing their most advanced defensive position in a fir thicket on the northern foot-path. (See Maps V. and VI.) Against the mid-range fire from this position, the right wing of the Fourth infantry regiment found good protection behind the extended undulations of the ground, but the rest of the

Fourth infantry brigade, and especially those between the wagon-road and the northern foot-path, were without shelter. The force of an attack could not be increased by a depth formation on the left wing, but the general thought it best for the time being to reserve a battalion at that point as support, although even no attack had been threatened against the left flank.

Major-General C—— was well aware of the division commander's intention of quickly driving the enemy out of his position. The men of the Fourth infantry brigade were tired. In spite of the hostile artillery fire, the parts of the Fourth regiment that were in the village had managed to obtain a drink of water, as far as considerations of tactical order would permit. But the general was not over-confident that the attack would be executed with the absolutely necessary briskness and rapidity, particularly during the ascent of the last 400 yards in front of the enemy. He accordingly decided to have all knapsacks removed.

An officer from each of the regiments was stationed near Major-General C——. Turning to one from the Fourth infantry, he said: "The Fourth regiment must join the Third infantry brigade in the attack, the left wing of which is stationed at the corner of the woods over there. Your front will extend until opposite the hostile battery farthest to the left." Turning to the officer from the Third infantry, he said: "The Third regiment, less the Third battalion, will attack along the wagon-road, securing the left flank and maintaining connection on the right." He then added so the two officers could hear: "Both regiments will unsling knapsacks."

When the officer from the Fourth regiment found his commander, Colonel G——, the latter was somewhat excited. The premature opening of fire by the Tenth and Eleven h companies had caused considerable loss. The enemy had evidently estimated the distance correctly (about 1,100 yards) and found the range. Though the skirmishers covered themselves skillfully, their fire action left much to be desired; a great number of the men could be seen rising only with greatest circumspection from behind cover in order to get a shot. The want of fire discipline was especially noticeable where the section leaders had been put out of the fight. It was utterly

impossible for platoon leaders on the skirmish line to rise, as they would be immediately shot down. The regimental commander, who, standing on the left flank of the First company, could survey the situation very clearly, found his course open to two alternatives—either to withdraw the skirmish line out of the fire, or support it by farther extending it; by adopting the latter course he would, however, commence the attack without orders. Yet there was nothing gained by leaving the skirmishers remain at a great distance from the enemy under heavy losses. As he was thus deliberating the officer rode up bringing him the order to attack. As he rode away from Hill 425 the officer had already given the Second battalion the order to remove knapsacks. Colonel G—— immediately despatched mounted riflemen (on foot, however), to the commanders of the two other battalions with directions to remove knapsacks. This measure entailed no inconvenience on the troops in close order, but the skirmishers of the Tenth and Eleventh companies had to get rid of their sacks lying down, and could not be watched closely enough to see that all cartridges were taken out of the knapsacks, as could be done in the case of the other companies.

Colonel G—— would preferably have used the Second battalion behind the center of his regiment in the attack, but the Third battalion seemed already so much weakened that it would not do to let it advance beyond Hill 361 without flank support and fully exposed to the hostile fire. He therefore decided to use the Second battalion on the right wing and the First battalion on the left.

An officer was accordingly despatched to the Second battalion, with instructions for it to attack in conjunction with the Third brigade, taking the corner of the thickets before mentioned as point of direction for the right wing. To the commander of the Third battalion, who had been summoned by a mounted rifleman, Colonel G—— said: "The regiment will attack the enemy's position in the direction of the batteries. You will connect with the Second battalion, and advance upon the battery at the extreme right. The Second battalion will start from Hill 425 within a few minutes." The regimental adjutant was sent to the commander of the First battalion,

and the battery on the extreme left was designated to it as point of direction.

It was 1:10 p. m. before the Second battalion could take up the forward movement. The transmission of orders had occupied some time. As the commander desired to bring his companies forward under cover as much as possible, and as they could not pass the steep grade south of Hill 425 in perfect order, he let them enter the ravine which runs past Height 361, in half platoon front. Upon debouching from the southwestern end of the ravine the leading company, the Sixth, was met with such a fire that it at once deployed throughout as skirmishers; but under support of the fire of the skirmishers of the Second regiment and of the Third battalion of its own regiment it succeeded in advancing in two rushes almost on line with the skirmishers of the Second regiment. But here it found itself forced to lie prone, and to meet the enemy's fire with sights at 875 yards.

The Seventh company, near which was the battalion commander, was halted by the latter just south of the ravine; for although there was yet room for deployment to the right, the company during a further advance might have become mixed with the Second regiment. The Fifth company, which was behind it, halted in the ravine. The eighth company had stepped out of the ravine toward the east, but, finding skirmishers of the Third battalion in its front, was obliged to forego any active participation for the time being.

Many wounded came back into the ravine from the Sixth company, lying under fire in front. Some men who had not been wounded were detailed assistant litter-bearers and took part in removing the wounded. Thereupon the battalion commander most energetically interposed, causing a platoon of the Seventh company to deploy into the skirmish line in front, as it became thinned out, and all men of the Sixth company who were not wounded were sent ahead with it. As the commander of the Sixth company had fallen, the commander of the Seventh went up to the front line. He especially directed that the men deploying should not carry the Sixth company forward with them, and that the signal for the decisive attack must be awaited, which signal would come from the right. The Sixth company had already ceased firing and was prepar-

ing to make a charge, but under the orders of the commander of the Seventh company it promptly resumed its fire. Before deploying into the line the platoon had fixed sights at 875 yards.

As regards the Third battalion of the Fourth regiment, the Tenth and Eleventh companies should really have waited until the skirmishers of the Second battalion had arrived on line with them. But when the Sixth company, in the lead, had entered the ravine, the commanders of the Tenth and Eleventh companies considered that the time had come to carry the fire (which had thus far been somewhat ineffective) closer to the enemy. The men were in hopes of finding better protection in the depression of the ground in their front, and awaited anxiously for the order to quit the position swept by hostile missiles. In the meantime the wild fire of some of the men who had lost their head made it very difficult for the platoon leaders to stop the firing. Their voices could not reach far enough, and only when platoon and section leaders together sounded their signal whistles was it possible to stop the firing.

Upon the command, "Rise, double time, march!" the skirmishers rushed to the front over Hill 361, rapidly crossing to the opposite side of the depression in the ground in order to escape the hostile fire, which was causing heavy losses. During this run of 200 yards, which could be made only without packs, some men were left behind completely exhausted. After the rapid movement ceased and the order to lie down was given, the skirmishers were unable to fire for some time, and not until the excitement had somewhat subsided was it possible to resume a regulated fire at from 750 to 800 yards.

This hasty advance had demanded bloody sacrifices, but it had made the advance of the Second battalion easier, as the enemy gave more of his attention to the Tenth and Eleventh companies. Some of their skirmishers could not fire, as they lay too low and did not see the enemy, and when several sections began to move up farther on the slope, in order to see, the movement was quickly stopped by the platoon leaders, as it might grow into another premature attack. Non-commissioned officers and lance corporals had assumed command in place of many platoon and section leaders who had

been put out of the fight. Some of the men, who had not found time to take off knapsacks and tried to do so before the rush, were prevented by the file-closers behind the skirmish line, who drove the men forward, but who could not prevent them falling behind during the run and thus increasing the skirmish formations in depth. The supports, 1 platoon behind each company, had followed the skirmishers pretty closely, and lay down sheltered in the bottom of the depression. The Twelfth company had received the order to advance, together with the Tenth and Eleventh companies, but as the two latter did not wait until it came up, the skirmishers of the Twelfth threw themselves down at 1,100 yards from the enemy, in order to support by their fire the advance of the others, and advanced over the bottoms in several rushes and formed on the left wing of the Eleventh company. Finally, the Ninth company remained stationary behind Hill 361 in a covered position in the hands of the battalion commander. The two foremost companies of the First battalion of the Fourth regiment (First and Third) followed the movement of the Twelfth company. The first position gained (900 and 1,000 yards from the enemy) was not a favorable one, as most of the skirmishers had a field of fire only when they arose to their feet. During a lengthy fire preparation this continual getting up and down fatigued the men. The two other companies of the First battalion (Second and Fourth) had still remained in the village, and their commanders were looking for exits allowing them to go around the houses in the edge of the village, which had been set afire by the percussion shells of the enemy.

The regimental commander went on foot to the Ninth company and asked for a trumpeter, when, at 1:45 p. m., a glance to the left wing of the Third brigade showed him that forward movements of the supports were in progress there, and a decision therefore close at hand. The parts of the Fourth regiment that were on the front line had fired, with varying success, for from 20 to 25 minutes.

The order to attack was received by the commander of the Third regiment shortly after 1 o'clock, in the southern edge of the woods north of Alt-Rognitz. Until that time no attacking movements were observed in the other regiments of the brigade on the right, but he did not wish to lose time

in ordering the start of the battalions under his command, as they still stood far to the rear. He had still less time by reason of the fact that the First and Second battalions of the Third regiment had not yet moved far enough to the left for the planned advance along the wagon-road. He therefore gave the following order to the two battalion commanders, who were standing at his side: "The First battalion will move to the first road to the east and secure the left flank. The Second battalion will advance to the attack from the present position of the First battalion, along the wagon-road, keeping touch with the Fourth infantry regiment. The point of penetration is the junction of the wagon-road with the enemy's position. I will accompany the first battalion."

Column of platoons was a very poor formation for the flank movement to the left in the woods. The First battalion, however, wheeled to the left by squads in this formation, and reached the road assigned it much more slowly, as would naturally be expected. The Second battalion broke by companies into squads, and formed columns of march in the Alt-Rognitz woods in such a manner that upon emerging it was in double column of march formation, the companies at 100 yards distances and intervals, a very favorable formation for winding through the streets and yards of the village. Up to the village the battalion was not fired upon, but at the southern edge, 1,300 yards from the enemy, the skirmishers were met with a fierce infantry fire. The battalion commander, seeing a glacis-like slope before him, thought he first ought to oppose the unshaken enemy by fire, and about 1:30 p. m. he had the edge of the village and an unfinished building in front of it occupied by 3 companies. As this fire was at long range, it produced no material results. Fifteen minutes later the regimental commander came hurrying along to inquire into the cause of the delay, and saw the left wing of the adjoining regiment far in advance and no connection whatever established with it. The battalion commander had fallen from his horse and the senior captain had assumed command; the regimental commander ordered the latter to extend the skirmishers to the right, while he carried the First battalion forward with the Second. The First battalion was lying under shelter in the northern edge of the village in line of company

columns. At the same time the brigade commander, who had ridden up to the left wing along the sunken village street, arrived near the Second battalion.

TERMINATION OF THE PREPARATIONS FOR ATTACK.

The last instructions given to his batteries by Lieutenant-Colonel J——, commander of the division artillery regiment, had not since been changed, although the enemy's guns, which had for some time been engaged by only two batteries, had again awakened to considerable activity, inflicting losses chiefly on the Second battalion. The Second, Third, Fifth, and Sixth batteries nevertheless kept up their fire upon the hostile skirmishers northeast of Neu-Rognitz, and succeeded in preventing the arrival of reinforcements. At 1:45 the regimental commander directed the Second and Third batteries to open fire on the ground in the rear of the enemy's skirmish line, as soon as the infantry attack should advance further. At the same time the officer who had been sent to the horse battery on the Galgen Mountain returned with word that the artillery of the First infantry division could be expected to go into action at any moment. More severe artillery fire than heretofore was actually audible in the direction of the Galgen Mountain. The Sixteenth regiment of field artillery had gone into action. The horse battery made ready to advance with 5 guns, in order to accompany the infantry attack beyond Hohenbruck. On account of the great loss of horses, it had not yet been possible to rehorse a single one of the guns.

The squadrons of the First regiment of hussars had retained the positions they had heretofore occupied. On the right wing the Fourth squadron had ascertained that the enemy's left did not extend beyond Sorge, and had immediately reported that fact to the division commander.

The 2½ squadrons near the church of St. Paul and St. John, together with the troop of the Third squadron on patrol duty, had found the country east of Rudersdorf completely free of the enemy. An officer's patrol sent toward Staudenz had not yet returned.

The commander of the First cavalry brigade had carefully followed the progress of the infantry attack, from his station on Hill 414, southwest of Hohenbruck. The First regiment of uhlans had been brought up to this hill, through Hohenbruck, and stood under cover behind it in line of squadron columns. The cuirassier regiment halted in column of squadrons between the village and the hill.

The First infantry division had continued the deployment southwest of Trautenau, and completed the same with the First infantry brigade at 1:45 p. m. The First battalion of riflemen had been pushed forward to Hohenbruck.

The left flank detachment of the Second infantry division (Eleventh company of the First infantry regiment and half a troop of hussars) had reached Raussnitz from Welhota.

COMMENTS ON THE CONDUCT OF THE DIVISION COMMANDER FROM 12:45 TO 1:45 P. M.

The period we have just discussed embraced the continuation of the movements for attack and in particular the preparation by artillery and infantry fire. The latter lasted an hour and a quarter on the right wing of the division, about half an hour in its center, and only 15 to 20 minutes on the left wing. The artillery has thus been active over an hour and a quarter.

Circumstances may arise where long-range preparation by artillery is sufficient to allow the infantry attack to follow forthwith; indeed, conditions may be such that the artillery fire need not even be preparatory alone, but also decisive, driving the enemy out of his position. In general, however, we must not be misled into the belief that the moment for the infantry assault has arrived as soon as some of our shrapnel have driven the enemy from certain of his advanced points, or their effect is even evident in his main position. We will do well to abide by the rule that *preparatory artillery fire should be followed by preparatory infantry fire*. Our first endeavor should be to advance our infantry within convenient firing distance of the enemy.

In the initiation of an attack, the artillery should first draw off the fire of the enemy's guns, and, if possible, drive

them back; then it should direct its fire against the enemy's infantry. At the same time the infantry should attempt to bring its skirmishers as far forward as possible, so as to carry its fire up to the enemy. Both of these obligations had been performed by the Second infantry division at about 1:45 p. m., and the termination of the attack had drawn nearer. But evident commotion in the ranks of the enemy, the gaining of favorable positions, confidence in our own superiority, the grasping of the hostile flanks, or similar developments must be awaited before an attempt is made to effect the assault, else we will have no cause to wonder if the attack does not succeed, in spite of the most careful preparation. It is evident that if such an attack is pursued with deliberation, in our day it will require more time to carry it through than has been the case heretofore, or, if conducted without thorough preparation, will have little prospect of success. It is still more certain that troops who have already undertaken one attack will not very soon be available for another.

We need not think it strange that it took the brigades more than an hour and three-quarters to get in position to undertake the final assault, although only a short space had to be traversed. Just as little should we condemn the giving of explicit orders, and say that such orders cannot be given in battle, as there is not sufficient time for it. *The fault is, that in war explicit orders are not given;* they are needed at the present day more than ever before, and wherever possible we should try to find time to issue them in writing, which will materially contribute toward the avoidance of errors. It is true, in some cases explicit orders are impracticable, as, for example, when joining in an engagement where troops have just about held their own or have commenced to fall back. On the contrary, we can find many cases in the past where there was ample time for the most explicit orders and explanations, but the time was not so utilized. The drama which is enacted at the front before the eyes of leaders not yet engaged is so impressive and interesting that many a one forgets in such moments the fact that he has preparations to make, and in all probability he will shortly be called on to take part in the action himself.

In the case before us, the division commander had personally maintained a calm, expectant bearing. At 12:15 he took station on Hill 500 alongside the left wing of the First regiment of field artillery, and did not quit that position even when, half an hour later, he ordered the closer approach of the infantry for the fire preparation and decisive attack. Indeed, even at 1:45, he was at the same spot, not having moved from it for an hour and a half, and had only once interfered with the action by issuing an order. After the artillery had been assigned its duty and the infantry had been put in position for the attack, he had no further dispositions to make. He could survey the engagement from his elevated point of observation better than if lower down with the troops. His whereabouts so selected were known to all subordinate commanders, and every mounted orderly knew where to find him. Had he instead ridden around among the troops, he would only have spread restlessness and made himself and those about him anxious. The commander-in-chief's appearance near fighting troops will never fail to make a good impression, while at times in the opening of a campaign it may be necessary, but such a step should be resorted to with moderation. When in close touch with an action the survey over the whole is lost and it is more difficult to make comprehensive dispositions with the necessary calmness. The essential point to consider in the choice of a station is facility to oversee and manage the engagement.

Nevertheless Lieutenant-General A——'s conduct seems open to question in two directions: he did not carry through the flank movement around the right wing of the opponent, and he did not hasten the start of the left wing of the Fourth brigade after completing its deployment. But on both these scores we must not condemn too hastily. No matter how well in hand a leader may have large masses of troops, conditions of time and space make the reins with which he guides them extraordinarily long, and a pull does not bring immediate response.

We have already called attention to the danger of a superior leader's causing precipitate movements through constant urging. Such procedure is warranted only where it is

important to renew energies once relaxed by great exertion. At other times there is generally quite sufficient tendency among troops to stretch every nerve to take part in an action at the first possible moment.

As for the projected movement, since issuing the division order at noon conditions had changed on the enemy's side. He had extended his right wing. This contingency was taken into account in the order of 12:45 p. m., which ordered the attack of the left wing along the wagon-road. The division commander could not extend his front farther than this. If the flank movement was not to succeed, then a frontal attack must decide. Anticipating this, the division commander designated the center of the hostile position as the point of penetration. Furthermore, some friction had occurred on the left wing. The First and Second battalions of the Third regiment of infantry took post too far to the rear and started for the attack late; moreover, the First battalion was held back in reserve, whereby the attacking force upon the point at first regarded as decisive was much reduced.

However, the question here concerned was not the urging on of troops, but the prevention of misunderstandings. The Fourth infantry brigade need not have been anxious about its left wing; the division commander could have relieved it of its anxiety, as he was aware that the First infantry division of the Guard had been requested to march upon Raussnitz.

Although the position of the division commander was well selected, it afforded no view of the eastern part of Alt-Rognitz, and an aid, accompanied by some mounted riflemen, should have been sent there for the purpose of continually reporting the situation. When the division commander gave the order to attack, he thought the left wing was in action farther toward the front. When none of his troops were visible on the wagon-road at 1:45 p. m., it became plain to him that he could count but little on the action of the Third infantry regiment. Although it was certain there was a reason for this delay, yet there was no time to search it out. It should not be forgotten that in executing an order a leader does his own thinking and governs his action by the movements of the enemy.

Had the division commander wished to avoid losses and a possible defeat, he could probably have delayed the latter phase of the attack, the assault. But the order of the corps commander to attack was perfectly plain; the superiority of the artillery was overwhelming, and even if the infantry attack should really come to a standstill, the First infantry division was so near that it could take a hand in the action within half an hour.

The general staff officer, with whom alone the division commander discussed the situation, agreed with his superior on all points. After the entire division had gone into action Major X—— remained near his commander, in pursuance of a positive order. The latter desired to have near him an experienced officer to whom he might express himself with perfect freedom and upon whose judgment he could depend. It was for this reason that, instead of sending away his general staff officer, he employed an aid to go to the left wing at 1:45 p. m. and obtain information with regard to conditions there.

COMMENTS: THE THIRD INFANTRY BRIGADE FROM 12:45
TO 1:45 P. M.

On account of the terrain, the two regiments of the Third infantry brigade had been compelled to deploy after quite divergent methods. As the First regiment could find no shelter in the terrain, it must seek protection by the development of the greater part of its firing power. Accordingly it had extended its breadth, and kept only a few companies in close order. At 800 yards from the enemy its power of attack from out of the depth was pretty well exhausted. The order for attack had been given. The attack could not be prepared at from 1,100 to 1,300 yards from the village of Hohenbruck, but the enemy must be approached more closely, which was correctly done. If the First regiment now forced the enemy to employ all his strength to ward off this attack, then the Second regiment, in action elsewhere, and under more favorable conditions, might break through his line of defense. Even with our far-carrying modern rifles, we will never be able, by long-range fire alone, to induce an opponent on the

defensive to evacuate his position. The assailant must approach nearer and nearer. This could be done by a part of the First regiment, as several platoons and 3 companies still remained ready to carry the skirmishers forward, although the Eighth company was certainly too far in the rear to engage in time. If the regiment had worked up to within 400 or 500 yards of the enemy while the other regiment executed the assault, the attack of both regiments could coincide, as far as effecting a decision was concerned; but it would not be a united assault. Colonel D—— could and must lead the regiment still farther to the front after 1:45 p. m. by employing his last reserves, for the right wing of the division was no longer in danger, and he learned from a few mounted riflemen whom he had sent out, that a whole battalion of riflemen and a brigade of cavalry stood ready for support on the right wing.

The most difficult task was assigned the Second infantry regiment, to which the point of penetration had been given with instructions to break through the hostile lines. It was fortunate that the solution of this problem was favored by the character of the terrain. It was not necessary to extend the regiment for a copious development of its fire, as the action of the artillery alone was already sufficiently effective. In view of the point of direction and line of separation from the other regiment, it need not extend its front over 440 yards. Such a narrow and deep formation on an open plain would have led to heavy losses, but here the ground afforded ample protection, so that the companies in close order could also retain a compact formation.

Extension and formation in attack is not dependent alone on the terrain, but materially so upon the task and the relation to other troops. A common formation for both the Third and Fourth brigades here would have been the posting of regiments side by side. Regulations call specific attention to the advantage of such a wing formation. In attack a deployed front of from 1,100 to 1,300 yards is prescribed for a brigade; a single regiment in use as a wing would, according to rule, require about half this frontage. Consequently it seems strange that in the case of the Third brigade, the First regiment occupied a frontage of 800 yards and the Sec-

ond regiment only 450 yards. The shortness of front in the case of the Second regiment was due to the fact that its right wing leaned on the First regiment, and the extension of its left wing was limited by the designation of the point of direction.

It would have sufficed to have sent a battalion to the first line, as a battalion has enough aggressive energy to carry through an attack for a considerable time on a front of 450 yards. Nevertheless the Second infantry regiment put 2 battalions in the first line, one beside the other. Even the regiment adopted a wing formation with its battalions when it formed up on the fighting line; this was especially for the purpose of preserving the units of command. It is self-evident that order can be maintained much longer in action if a battalion sends forward its own reinforcements than if men from other battalions, whom the leader at the front does not know, are deployed into the skirmish line. Besides, the battalion commander and his subordinates keep the battalion wholly in hand if it fights by itself. When alone, it can respond promptly to every call; but when organizations are mixed, order must first be re-established. In consequence of its narrow front, the Second regiment also took a depth formation of about 450 yards. There were therefore about 3,000 assailants in a breadth of 450 yards, a little over 7 men per yard, which is not at all too many for a decisive attack.

Colonel E——, commanding the Second regiment, was entirely correct in not leaving the First battalion in reserve, but placing it in the third echelon for attack. Losses in the 2 battalions at the front would soon call the First battalion forward, and portions of it in close order would effect the decision in the final assault. When, as in this case, a frontal attack is to be made, the assailant must be formed deeply in order to have some reserve power for the final rush. The First infantry regiment, however, was contending under entirely different conditions. It would have been well if it could have preserved its deep formation, but circumstances did not permit this. The enemy was in front and was widely extended, and, as the regiment was not confined on its right, it could extend itself also; it must do that, if it would master its opponent. The deep formation prescribed by Regulations was

to be abandoned on account of the ground, the strength of the hostile fire, and the freedom for extension, and hope for success was based materially on the good marksmanship of the skirmishers. The First regiment sent 8 companies into the first line, on a front of 800 yards, keeping in rear only 1 company; as 2 were to cover the right wing. Forthwith the 3 battalions considerably mixed were deployed beside each other, while it would have been better to keep 1 battalion still in close order. The reason for the early mixing of the companies will be considered later on.

The number of skirmishers employed determines the density of the skirmish lines. Colonel D——, First infantry, intended to subdue the enemy by the development of a strong fire; he therefore ordered the deployment of dense skirmish lines, the men elbow to elbow. In the case of the Second infantry regiment, which was in the woods, only one or two sections were deployed in front of each of the four companies; these did not fire, but were only to watch, or, in case of need, turn back isolated patrols. When the order to advance was received, the companies formed skirmish lines as prescribed in Regulations—*i. e.*, with an interval of one or two paces between skirmishers. These intervals must be assumed unless otherwise ordered. By them an infantryman enjoys a certain freedom in making use of the terrain. But above all, it is more difficult for the opponent to get his aim or make a hit, as missiles which are deflected laterally by errors of the hostile skirmishers or other causes pass through the intervals, doing no harm, whereas a dense skirmish line affords a connected target, in which every bullet fired at proper elevation makes a hit. Even at mid range the Second regiment did not close the skirmish line, for the artillery had already done good work and the normal skirmish line was sufficient to overcome the hostile infantry. Where supports deploy into the line, it is done to replace losses and keep up an even fire.

Skirmishers are not required to preserve an exact alignment. The skirmishers sent out by both regiments were not at all on the same line. Those of the First regiment had remained behind, with the Tenth company alone lying down somewhat in advance; the other regiment had worked forward over 100 yards beyond. A skirmish line is given points

of direction within or beyond the enemy's line, and one part must keep in touch with the other. It would have been an error if the skirmishers of the First regiment had attempted to advance under a heavy fire to within 700 or 800 yards of the enemy, simply for the sake of keeping up the alignment. An effective fire can be delivered just as well with sights at 800 yards as at 700 yards. The gain of the 100 yards' space would have been bought at a great sacrifice.

As already stated, the 2 regiments of the Third infantry brigade, on account of the formation of the ground, had to resort to very different measures in order to properly initiate the attack. They both had a great advantage in that their advance up to 1,200 or 1,300 yards could be carried out under cover. At these distances only the long-range fire of the hostile infantry would be felt. On an open plain, as at St. Privat in 1870, losses occurred even at 1,500 and 1,600 yards, and in 1877, in the Russo-Turkish War, the Turks lying behind intrenchments inflicted heavy losses on the Russians at the same distance. The task here assigned the First infantry regiment was certainly difficult. While the other regiment of the brigade found shelter in the terrane at least in some places, the First had to forcibly make its advance possible by opening fire at long range. In partially open terrane the modern attack will be divided into three periods: the advance to mid-range distance, subduing the enemy by infantry fire, and the assault.

The First regiment had succeeded in working up to within 800 yards, where it found that its opponent was extended in an equally broad front. It was, however, lacking in depth. It was natural that signs of crumbling and a certain dissolution should be observed. The slackening of individual energy called for remedies and energetic measures, which were immediately applied. In this case the mingling of the companies was a great drawback. On the right, in particular, companies of the First and Third battalions could be found fighting promiscuously. As long as the men were of the same regiment, this, however, might be allowable. Such occasions furnish opportunity for brilliant display of energy on the part of platoon leaders, who, in general, are the soul of the skirmish action on the most advanced line. When the line sud-

denly comes to a standstill without orders, or an ardent desire to fall back is manifested, then it is that the personality of the platoon leader will turn the scale, and a sharp and correctly given word of command will not be without influence even though the moment be one of the most trying.

Very soon we will again have in our Army a large number of young officers without experience in war. It is well to acquaint them with the dark sides of it, for the imagination will seldom paint these of its own volition. The young officer should be taught war as it is, so that such incidents will not take him completely by surprise, but find him ready to take judicious measures.

Even with the most gallant and highly disciplined troops, things will occur in war that we would hardly have believed possible. In this study we have an opportunity to paint a scene that no peace maneuvers can furnish.

Imagine, for an instant, that Hohenbruck's position on the great highway to Trautenau and the events being enacted near it brought many wounded men to the village, in the company of attendants. On the main roads, wherever shelter was to be found, large numbers of non-combatants of every sort assembled—bands of near-by regiments and their led horses, as well as the led horses of the headquarters staff, etc. Add to these the cartridge-carts, medical-wagons, and various vehicles of the ambulance company.

For a time this great aggregation of auxiliary and reserve forces remained in comparative security, but when the action began to assume an uncertain mien the conditions changed. The infantry at the front fell back slightly, fugitives rushed into the village, and amidst the houses a hail of bullets fell. Then all of a sudden this entire hitherto motionless mass began to surge. Such of the wounded as were able to walk tried to get under shelter. Men with led horses and various vehicles tried to save themselves and get into motion again. North of the village, on the Trautenau highway and along its side, there rolled along a disorderly crowd, slowly at first, then faster and faster, and finally on a dead run. If it should have happened at just that moment that the squadron of hussars posted there should wheel about and retire a few hundred paces in order to open an adequate field of attack

for themselves, then the picture of a perfect rout would have been lifted before the troops. And we know that such a picture does not in the least tend to raise the morale of men, a thing so desirable in like situations.

To obliterate this idea of a rout, it is necessary to promptly lead the troops forward whenever terrain and conditions will permit. At the same time we must endeavor to check the stream of fugitives, else they will cause all manner of mischief; they will induce trains that have been ordered to the front to turn about again; they will spread alarming news, which may even reach home itself. Such a stream can only be arrested by halting those in the lead, and officers and men sent out on such an errand must use all the means at their disposal. Under the circumstances, this work would have naturally fallen to the Fourth squadron of the hussar regiment, which would have performed it by despatching an officer with a troop.

Such events, however, did not take place during the engagement under consideration. A few sudden stops and tendency to give way on parts of the skirmish line of the First infantry regiment were overcome by the platoon leaders, who are not only the life and the impelling and directing element on the foremost line, but are the ones upon whom devolve the employment of the principal means of combat, fire control. Even in peace a company commander cannot by his voice direct a company of 100 or 120 men firing ball cartridges. How can he do it, then, with a company at war strength? Fire control consequently depends on the character of the platoon leader, and it devolves upon his talents to show how effectively the guns entrusted to his care can be used. In Part II., paragraph 55, Regulations state specifically: "The station of the platoon leader must be chosen with a view to observing the effect of the fire of his platoon. He forms his platoon in the position assigned it, and designates its target either independently or in accordance with orders. He watches the enemy closely, and co-operates with adjoining platoons on the fighting line as far as he is able."

In the year 1866 the quick-firing breech-loader brought a decision at close range. A tolerably trained shot, who aimed horizontally, could accomplish great results with the needle-

gun. The victory in the infantry contest of 1870 was due to the advance of the German foot troops to the initial limit of the range of their gun (650 yards), regardless of great losses, although the gun they carried was inferior to the *chassepôt*. In our day fire superiority will be determined at ranges of 600 to 1,100 yards. Indispensably necessary to an advantageous employment of the gun is the knowledge how far we are from the enemy, the estimation of distances. The company commander will probably never be able to fix the distance to the enemy for the entire deployed company. The targets for the several platoons may be quite different. The platoon leader is responsible for the estimate, and two or three experts at estimating distances are assigned him as assistants. If in addition opportunity is found to allow some of the section leaders to call out their estimate of distance, then the platoon leader should be able to establish an approximately correct mean by taking all the estimates into consideration, and order sights fixed accordingly. Intercourse between platoon leader and men is regulated in action by the brief language of command. This terse, sharp, and clear method of expression must be acquired, and calls for the most laborious application. Every unnecessary word disturbs the skirmisher. Wherever there is noise on the skirmish line, we may expect to find poor fire discipline.

At the close of paragraph 55, Regulations state: "It often happens that the one best able to see where advantage can be taken of the character of the terrain or conditions with the enemy, is the platoon leader on the skirmish line; but the platoon leader must satisfy himself how far he can take such advantage on his own responsibility." To satisfy himself, he must not only consider his own fighting line and the near-by enemy, but he must also look back to the rear, to see how far he is in advance of bodies in close order, and what such bodies are doing. He cannot, however, accomplish all this in person; to assist him he has expert estimators, and he cannot insist too strongly that one of these turn his back on the exciting events in front, in order to watch the measures of troops in the rear. How wrong it would have been had one of the platoons of the First regiment sallied out from the skirmish line to gain ground forward! The enemy still possessed his

full fighting power, and would have directed a concentrated fire on the single platoon dashing ahead. Besides, the platoon would have entered the fire of the skirmishers lying down in the rear, and thus have suffered from shots of the men of its own regiment. Nor was anybody in close order at hand, to quickly turn to account any advantage possibly gained. And if several more platoons had joined in such a planless undertaking, the situation of the skirmish line of the regiment might have been critical indeed. No platoon leader, therefore, had the least intention of working himself farther ahead without the pressure of newly appearing subdivisions from the rear, and each one concentrated his entire experience and presence of mind on a correct fire control.

The advance of the Tenth company was more excusable, for the patch of woods in its front actually afforded advantages; in reality, however, the seizure of the woods was valueless, as at that time the border next to the enemy could not have been held at a distance of 300 yards.

In the skirmish line of the Second regiment every one momentarily awaited the order to advance. The platoon leaders did not advance of their own accord, for they were schooled so well tactically that they awaited the start of the supports with perfect composure. They certainly could not expect to receive an order to go ahead, as messengers or bearers of orders could not move about in the hostile fire. This was out of the question. The human voice, too, is not able to shout orders for hundreds of yards amidst the crack of rifles and swish of bullets. The platoon commanders must therefore depend upon sight for their connection; as soon as they should see supports starting out, then the time would have come for them to move also.

In action it is also possible to communicate by means of signs. On page 3 Infantry Drill Regulations prescribe some such signs, while "other signs must be specially invented by the leader."

Should the skirmish line of the Second regiment advance farther, the open ground would doubtless have compelled it to do so in double time. It had advanced to the firing position it occupied at a run when under fire and at a walk when sheltered and in the bottoms. Running over protected ground

would have been a gross violation of the principle to preserve the strength of the troops. The skirmishers of the Second regiment were lying partly behind an undulation of the ground, under cover, while those of the other regiment had thrown themselves upon entirely open ground. The first had crawled to cover in a stooping position, while the others had rushed rapidly forward under the hostile fire, so as to shorten the time of exposure. The skirmishers of the First regiment could have been brought forward out of their unsheltered position very easily, for their condition could hardly have been more perilous; but it would have been difficult to induce the skirmishers of the Second regiment to leave the protecting undulation.

As long as a portion of the company and platoon leaders are able to fight, the frictions in action can be overcome by the fire and battle discipline acquired in previous training. In order to exercise the necessary influence in this direction, every officer and non-commissioned officer charged with these duties must be locally in the proper place. Ordinarily the platoon leader directs the fire of his platoon from the center, a point from which his commands can best be heard to the right and left. If the wind blows from the side, he goes to the windward, so the sound of his voice is carried farther.

No special position is prescribed in Regulations for the company commander when part of his company is deployed as skirmishers. On page 95, Part II., we find the following: "The company commander must keep the control of his company well in hand. His instructions to the platoon commanders should be in the form of brief and lucid orders. He should post himself where he believes he can best exercise control over all. He should see that the ammunition brought from the rear is properly distributed to the skirmishers, using for this purpose all means on the field at his command."

If only 1 platoon is deployed as skirmishers, the company commander should keep the other parts in close order. So he may meet all demands, his position in action will probably be selected between the skirmishers and supports. In addition to the trumpeter, who remains near him in accordance

with Regulations, he will usually require one or two adroit men to act as messengers.

The support is generally commanded by an experienced lieutenant. Only a few supports were left to the First regiment; several companies were supported by half-platoons in close order, and the Seventh and Tenth companies by a platoon each. To keep out of the shower of bullets the supports very properly remained about 200 yards in the rear. The Eighth company, however, kept back too far; there were very few bodies in close order behind the skirmish line, and therefore the company should not have taken a distance of 450 yards. Upon the principle that bodies of troops in close order must go forward as soon as their skirmish line opens fire, the Eighth company should have moved up long ago. If it thought it would suffer severely in line or platoon column, it could have emerged from the woods deployed as skirmishers, and closed up again upon halting.

The companies lying as support behind the skirmishers adopted the platoon column formation. In it the men can best be kept together and battle discipline preserved. Some battalions, however, remained in column of march until they came under a damaging fire. The First battalion of the First regiment could assume no other formation in the sunken road northeast of Hohenbruck. The passage through the village, moreover, could not be effected except in column of march by companies. Upon coming out of the southern edge of the village the First and Second companies even deployed immediately as skirmishers, because there was no time left to form platoon columns. The First battalion of the Second regiment still retained its column of march by companies after passing through the woods, because it could not find sufficient shelter in the terrane, and could better adapt itself to the accidents of the terrane.

In order that second and third echelons may know what direction to follow during an action, even when the ground is partially obstructed from view, they are given the same point of direction as is assigned the skirmishers in front. The main point of direction is assigned to one body of troops alone, and it is responsible that the same is maintained; in this case it was the Second battalion of the Second infantry, and

in particular its left wing. It is evident that other bodies of troops, like the First infantry regiment, who could not see the northeast corner of the big woods north of Neu-Rognitz, must select another point of direction, but one that shall be in accord with the conditions. The First regiment chose the projecting point of woods east of the highway, and charged the Second battalion with keeping the direction. The point of direction was so chosen that it assured connection with the Second infantry regiment, as ordered; 100 yards, or even a slightly greater distance, from the connecting regiment, makes no difference. Keeping in touch does not mean being elbow to elbow, but concerted action for a common purpose. If Neu-Rognitz had a church-steeple, that church-steeple should have been chosen. The corners of the woods vanished from sight here and there in low parts of the terrane; therefore it was necessary to carefully choose intermediate points if the designated direction would not be lost.

When the brigade had come within mid-range distance of the opponent, the brigade commander could do nothing more toward maintaining the direction of march. His station was with the reserve—in this case, with the First battalion of the Second regiment. Neither could he any longer issue an order for the decisive advance, as no one, mounted or on foot, could traverse the battle-field on orderly service under such a fire. Major-General B——— made his intentions known only by sending the First battalion into action, which, in the midst of the fight, he held under his own special disposition, of which fact he duly informed Colonel E———. Indeed, the First battalion of the Second regiment did not constitute a reserve at all, but a body in close order, to be saved until the end for use in the final advance.

Strictly speaking, the final charge, the one intended to bring about the decision, should never be undertaken until the enemy is seen to be shaken by the preparatory fire. Nevertheless, under certain conditions, the general situation may compel us to make it at an earlier period; but *in such cases it is always necessary to avoid undertaking it at too great a distance from the opponent, and to see that the successive lines have previously been closed up to the most advanced fighting front, so as to join in the action at the proper time.* In such

an attack, that great impulse to seek a decision is especially manifest in the final charge, and to crown it with success we must stake the whole force at our disposal.

When such decisive attacks are undertaken by larger masses, they will entail greater sacrifices the less they are favored by the ground. We should clearly understand this at the outset, and undertake them only when forced to. And then we must give them the most careful preparation, and, when the decisive moment has come, stake all upon a single throw.

One thing is certain: When attacks by larger masses are nowadays undertaken, it is essential to have the most perfect accord among all the commanders, in viewing the situation and in conducting the action; and this can only be attained by the most careful training. *It is for this reason that we should practice combat tactics of large forces as thoroughly as possible, not alone on the drill-ground, but also on the most varied terrain.*

COMMENTS: THE FOURTH INFANTRY BRIGADE FROM 12:45
TO 1:45 P. M.

The project of a flank attack upon the enemy's position was all right in itself. Experience shows, however, that it is exceedingly difficult to carry out such an idea right in front of the opponent. According to generally accepted principles, nowadays a flank attack can be made only by marching upon the flank from a great distance, and at the same time holding the enemy fast by a threatened frontal attack. If he is not held fast in the front, he will change his line, or extend it toward the menaced flank as soon as he received report of the approach in that direction. Changes of front and shifting of troops can be readily effected by the simple and flexible form in which armies move to-day. In the eighteenth century a formation once established for defense was almost immovable. It required a long time to concentrate troops on the threatened points in a defensive front. In the battle of Leuthen the clumsiness of the movements of his opponents gave the victory to the assailant, Frederick the Great. At Austerlitz, one of his few defensive battles, Napoleon assumed the offens-

ive, advancing his left wing and center in a counter-attack, thus scattering the clumsy columns of the Austrians and Russians as they marched past the French to make a flank attack on the right wing. On the other hand, a flank attack succeeded sixty years later, at Königgrätz, which, although not consummated on the battle-field, was initiated and brought to a finish by a strategical maneuver. At Königgrätz, and also in 1870 at Gravelotte and St. Privat, the flank attack was made possible only by holding the opponent fast in front.

In the study before us the division commander was in the disagreeable position of being obliged to attempt a flank attack in sight of the enemy between Alt-Rognitz and Neu-Rognitz. He carried out his plan on the supposition that the enemy was weak and could not extend his front. This supposition turned out to be erroneous. A flanking movement farther around the hostile right wing might have been successful, but then the division's front would become still more extended, and it was already a little short of 2 miles in length; and by a counter-attack an enterprising defender could have torn asunder the line of the assailant, which was thin enough in the first place. Lieutenant-General A———, therefore abandoned the hope of favorable results from a flank movement, and made his calculations for success through an attack in front. It was very fortunate for this purpose that the Fourth regiment had been formed up at the side of the Second.

Major-General C——— had designated a point of direction for each wing of the Fourth regiment, and thus limited the front of the regiment to 550 yards. Connection with the Third brigade was established by giving the same point of direction on the enemy's position, to the right wing of the Fourth regiment and the left wing of the Third brigade—viz., the northeast corner of the big woods. According to custom, the Fourth regiment should have placed 2 battalions in the first line, and the third in a line behind; but this would have necessitated a shifting of the Second battalion by the flank, under hostile fire, which could hardly be carried out. Colonel G——— therefore put in his battalions side by side, and this narrowed their front.

The Second battalion had only a single company in front; but the First and Second battalions could form in column and support the Third battalion at the center. Another guaranty of the maintenance of the depth of the attack was the gradually narrowing width of the front, whereby the losses in the skirmish line would be felt less when closing up to gather impetus for the assault.

The wagon-road had been given as general line of march direction to the Third regiment less the Third battalion. Such a measure is not to be recommended, and proved of no advantage in this case. Roads like this are hardly ever straight, and give the eye no support. So it happened that at the very start the regiment lost connection to the right, and was not available for the latter part of the attack (which began at about 1:45 p. m.) because it was too far away and in rear and had put only 1 battalion into action, in accordance with the injudicious order of the brigade commander. The security of the flank should have been disregarded, and everything disposed of for the attack. In case of necessity, the division commander should have been requested to send the reserve to the left wing. The condition became perfectly clear to the brigade commander, who rode up to the left wing as it appeared to be failing, and he could not help approving the dispositions of Colonel F——, who had finally brought up the First battalion for the attack.

A few more details in the conduct of the Fourth brigade are worthy of mention. The commander of the Second battalion of the Fourth regiment at one time interposed in the sphere of authority of a company commander, and ordered a platoon to deploy as skirmishers. Although this is totally contrary to custom and an encroachment on the independence of a subordinate, nevertheless it is comprehensible, excusable, and even requisite. Ordinarily it is left entirely to the company commander to determine how many platoons or half-platoons shall be deployed as skirmishers. A suggestion to deploy a weak or a strong skirmish line can at least serve only as a guide. Instructions as to how many shall be deployed are not given by the superior. However, as here the falling back of parts of the Sixth company threatened to some extent to endanger the whole, and as no time was to be lost, the battalion

commander promptly ordered a platoon to deploy forward into line.

Platoon and section leaders of the Third battalion of the same regiment made use of the whistle on the skirmish line of the Tenth and Eleventh companies, while with other companies the voice proved sufficient. The use of the whistle is accompanied with the disadvantage of its sphere of effect being limitless. If one platoon is to cease firing in order to change sights, and the leader uses his whistle, the whistling may also affect adjoining platoons. In the case before us, the entire line should cease firing and pay attention, and thus the whistling was correctly and successfully employed.

Considering the performance of the Fourth regiment after a general manner, it was undoubtedly necessary that the center and left wing (Third and First battalions) should advance nearer to the enemy; the left wing was almost three-quarters of a mile from the opponent, and its fire could not be sufficiently accurate; besides, an advance was especially favored by the gentle rise in front. The detachment of a part of the regiment jeopardized the uniformity of the attack, but still more precarious was the delay in the advance of the Third regiment. The nestling of the skirmishers of the Second battalion in the edge of the village, 1,300 yards from the enemy, was tactically erroneous. Although the battalion could not undertake much against such a strong position, it should at least have advanced to the line of the connecting regiment.

As regards the removal of knapsacks, we must agree with the brigade commander; yet it is a measure concerning which views differ widely. It is certainly improbable that a battalion which has once removed its packs will ever see them again if the action goes amiss, and even if the engagement is successful, troops that continue the pursuit of the enemy may only get possession of their knapsacks after weeks have passed. It is easy enough to say either that the knapsack is generally unnecessary and therefore should be gotten rid of, or that it is a necessity and therefore should never be removed; but neither of these propositions expresses the full truth. Generally speaking, the knapsack is a part of the soldier; it should not, as a rule, be removed, and only when extremely necessary. We find occasions, however, when ex-

traordinary exertion is likely to be required, or strength has already been used up to such an extent that relief must be granted if further effort would be sought. Then all other considerations vanish, and in order to accomplish the aim of the moment we may lay aside the thought, "What will become of the knapsacks that have been unslung?"¹ In moments of extended rest it is always advisable to unslung knapsacks, a measure that was overlooked by division headquarters at Parschnitz.

At 1:45 the major portion of the Second division was ready to enter upon the final phase of the attack. The entire four regiments had striven to advance up to effective range and group themselves for joint action. The front extensions differed according to terrain and instructions. The First regiment had a frontage of 750 yards, the Second of 450, and the Fourth of 900. The first was formed in two battalions, intermingled, side by side, one echeloned to the right; the Second of two battalions in the first line and one in the second; the Fourth was able to lead its battalions into the fire side by side and in good order. It is an established rule to combine a strong fire front with depth, but circumstances will make either the one or the other more essential. The demands of an action vary so much that rigid forms are not suitable in every case.

COMMENTS: THE CAVALRY FROM 12:45 TO 1:45 P. M.

The First, Second, and half of the Third squadron alone remained in the hands of the regimental commander. For the time being this force remained east of the church of St. Paul and St. John, in pursuance of Lieutenant-General A——'s instructions (page 169) to follow the Fourth infantry

¹Any man who has ever witnessed the relief afforded troops by taking off knapsacks after a hard march, under a hot sun, over difficult ground, and observed with what new vim they then enter the action, will concur in this view. I can still see several companies of the Fifth corps at Nachod, who, almost overcome by the heat, could hardly move, calling back in answer to words of exhortation. "Yes, Major, if we only had these monkeys off our backs!" When permission was given to remove the knapsacks, it seemed as if the men had completely forgotten all the hardships of the hasty march in the mountains under a June sun.

brigade. By remaining at this place they were less able to participate in the engagement, because they were nearly two-thirds of a mile from the foremost line, while their advance would be delayed by passing through the intervening village. If cavalry is to take part in an infantry action at the proper time, it must find a sheltered position near the first line, in addition to a proper field of attack. If the terrain does not afford such a position, then a timely interposition is naturally out of the question. Here the ground south of Rudersdorf was not exactly favorable; but nevertheless $2\frac{1}{2}$ squadrons could have posted themselves under cover near the southern edge of the village. The regimental commander had done too little scouting. The movements of the enemy between Neu-Rognitz and Staudenz should have been reported long before they were.

Meanwhile the Fourth squadron of the regiment was behind the right wing of the Third infantry brigade. Its leader had previously taken pains to strengthen his weakened force by calling up the patrols and other detached hussars. But with all this he should not have lost sight of the fact that it was specially important to do all he possibly could with what troops he had in hand. Events certainly presented opportunity for advantageous action.

Places where cavalry can be used are easily recognized. As far as the leader of the Fourth squadron could observe from where he stood, his field of attack could lie only south of the village. If the opponent should appear in that vicinity, opportunity to employ the cavalry would soon arise. But the squadron should not at the outset have taken post south of Hohenbruck, for it would then have been uselessly subjected to hostile fire; yet it could have sought a sheltered position out of which it might have suddenly appeared at the proper moment. The houses and gardens of Hohenbruck afforded an excellent opportunity for this; the squadron could have debouched from the western part of the place in a few minutes, particularly if the road space had been widened by pulling down fences. The cavalry must hold itself in readiness to attack the enemy in flank should he possibly advance for a counter-attack, or assist its own infantry in making the assault.

In judging the work of cavalry it is very unjust to use the terms "fortunate attack" and "unfortunate attack" in their literal sense; we should rather say "useful attack" or "useless attack," which will afford a more just scale of measuring its attainments.

Still another point deserves consideration. Whose duty was it to put the Fourth squadron into action—Major-General B——'s, or the squadron commander's? In the first place, it would have been the duty of the brigade commander to give it orders, for it had been specially placed in the position it occupied by his directions. But just here occurred what will frequently happen in such cases: under the excitement of the principal infantry action, the general did not think of the one squadron. It was then the duty of its leader, the moment he had carried out any previous instructions, to report in person to his superior and ask what he should next do; he should have looked around of his own accord, and seen if there was any opportunity for his employment. War requires every commander to consider where and how he may be useful, and to develop independent thought and action, and not limit his usefulness by waiting in every instance to be prompted by his superior.

It was on this principle that the commander of the First cavalry brigade acted. Lieutenant-General A—— was too far away to permit of Major-General L——'s going to him for orders. By choosing a position from which he could "survey the terrain, the enemy, and the status of the engagement, and at the same time keep his troops in hand," he found the right point (Hill 414), and brought his troops together in shelter behind the hill. From there he threatened the left wing of the hostile infantry. He had his troops dismount, while his officers reconnoitered the country and watched the enemy, whose left wing was quickly located.

COMMENTS: THE DIVISION ARTILLERY REGIMENT FROM
12:45 TO 1:45.

The measures taken by the First artillery regiment were quite simple, as the character of the terrain did not permit much changing of position. Drill Regulations prescribe in

detail the conduct of artillery in attack: in order to silence the hostile batteries at the order of the commander-in-chief, it must "concentrate an overwhelming fire on the part of the enemy's line that is to be attacked, and from a flanking position whenever possible, while a portion of the batteries are devoted to silencing the hostile artillery, and particularly so much of the hostile artillery as can direct an effective fire upon the field of attack;" further, "if, after the infantry attack has begun, fresh hostile batteries, or such as have resumed fire, should open upon the artillery, the latter must nevertheless continue to support the infantry attack with its main force." This course was adopted, by direction of the regimental commander. The fire upon the point of assault was kept up from a position which furnished a good view and which was high above the infantry. It was thus made easy to distinguish friend from foe and to observe the effect of the shots. When the assailing infantry had approached within 700 or 800 yards from the defender, the terrane behind the latter was also taken under fire, in order to render it more difficult for the enemy to bring up reserves.

Lieutenant-Colonel J—— was able to make all these dispositions in due season. Being near Lieutenant-General A——, he was quickly informed of the latter's intentions, and he could clearly judge for himself, from his own station, the status of the engagement.

The advance of the horse battery to accompany the infantry attack "at close and most effective distance," deserves commendation. The battery leader intended to "strengthen the attack morally by a bold participation," and saw all the more occasion for this when he recognized how trying the situation of the First infantry regiment had become.

The belated participation of the Sixteenth field artillery regiment must be charged to the unfavorable condition of the streets of Trautenau. The battery of the advance guard should, however, have gone into action independently, and without delay.

ATTACK OF THE SECOND INFANTRY DIVISION TILL THE CAPTURE OF THE THICKETS NORTH OF NEU-ROGNITZ
AND ENTRY INTO THE VILLAGE.
(1:45 TO 2:25 P. M.)

At 1:45 Lieutenant-General A—— left Hill 500, north of Alt-Rognitz, and went to Hill 513, between Hohenbruck and Alt-Rognitz, nearer his foremost line.

Before leaving his station he received the report of the division surgeon, according to which the latter had established his main dressing station in the village of Alt-Rognitz, consolidating it with the dressing station previously established there. The surgeon also stated that the advance guard of the First division had provided for the right wing, and that its ambulance company was already at work north of Hohenbruck, also that he had given orders to the Second field hospital to remain in Kriblitz, and that the chief surgeon of the corps would have another field hospital established in Trautenau.

The division commander approved these arrangements and directed that patrols be organized from the field gendarmes and orderlies, who should direct all wounded men going to the rear in the vicinity of Hohenbruck and the northern extremity of Alt-Rognitz to the respective dressing stations, and at the same time send back to the fighting line any one going to the rear without good cause. Prisoners were to be sent to Trautenau. Besides, two patrols were sent to Hohenbruck and Alt-Rognitz for the prevention of irregularities and excesses there and returning any men found absent from their commands.

The general then turned toward the sunken road east of Hill 460, where the Third battalion of the Third infantry regiment was standing at his disposition, and directed its commander to follow the attack behind the Fourth infantry regiment. Next he determined to seek out Major-General B——, who was with the First battalion of the Second infantry regiment, it having been reported that the commander of the other infantry brigade had ridden into Alt-Rognitz to the left wing.

As he ascended the eastern slope of Hill 513 he came across the commander of the Third infantry brigade at the edge of the woods, who reported the course of action up to that moment on the right wing and stated that subdivisions of the First infantry division were already approaching Hohenbruck, and that their artillery had gone into action on the Galgen Mountain and was now under fire; he also expressed the opinion that the time had come to make the decisive attack. The division commander ordered him to await for a few minutes longer the effect of the fire of the batteries which had gone into position near and upon the Galgen Mountain. Upon being asked where a good point to observe the engagement could be found, the major-general directed him to the southern corner of the thicket near 513 as the most suitable station.

Both of the general officers then started out to ride to the point mentioned by Major-General B——, and *en route* were met by an officer from corps headquarters, who brought word from the corps commander that the First infantry brigade had received orders to attack also via Hohenbruck, west of the highway, and that the Second infantry brigade would be brought up in reserve astride the highway north of the village. The officer also stated that the First division of the Guard corps was approaching, and that its point was only about a mile and a quarter from Alt-Rognitz and would turn against the hostile right flank via Rudersdorf.

The general staff officer of the Second infantry division was instructed to inform this officer fully regarding the state of the engagement and the further intentions of the division commander, for the information of the commanding general.

Having arrived at Thicket 513, Lieutenant-General A—— immediately repaired to its southwest edge, in order to obtain a survey of conditions on the extreme right wing, which had hitherto been beyond his observation. From that point he observed a lively engagement taking place on both sides of the highway on a line with the southern portion of Hohenbruck, and also a few isolated smaller columns farther back near the edge of the thickets. Cavalry was visible on the opposite side of the highway near Hill 414. Upon inquiry as to whether the bodies in close order visible on the southern

edge of Hohenbruck belonged to the First division, Lieutenant-General A——— was advised that they constituted a battalion of the Third brigade; which occupied Hohenbruck, and which would now doubtless advance with the First division as it joined in the action.

Although the firing had increased considerably within the last quarter of an hour, at that moment (1:58 p. m.) it appeared to be growing all the more intense toward the southeast; the thunder of cannon and rattle of small-arms was accompanied by a continuous roll of volleys. Both generals proceeded quickly to the southern corner of Thicket 513, from which point they noticed that the Fourth brigade had already commenced the attack, the leading troops of which were crossing the strip of meadows at the foot of the ridge and rushing up the slope. The extreme left wing of the Third brigade seemed to have joined in this movement.

The division commander immediately ordered Major-General B——— to join with the entire Third infantry brigade in the final attack (2 p. m.).

The picture now being gradually unrolled before the eyes of the division commander afforded little opportunity for the observation of details, but in general it could be described as follows:

In his front the Second infantry regiment disappeared from view in the depression near Saddle 451; it was therefore doubtless making some progress. At 2:25 hurrahs and the sound of signals were heard from that direction, while parties of the enemy were seen hurriedly falling back into the woods north of Neu-Rognitz. The rolling terrane made it impossible to see to what extent the Fourth infantry regiment participated in this assault; at all events, none of the troops were coming back over Ridge 527.

The advance of the First infantry regiment on the right wing was decidedly difficult, and more lingering than in the center of the attack. At 450 yards from the enemy the regiment came to a halt, when it seemed almost as if it would succumb to a counter-attack that was seen being prepared: but at the same moment infantry and artillery debouched from Hohenbruck and cavalry moved out from Hill 414. and as

well as could be seen amidst the clouds of rising dust the enemy was falling back on Sorge.

On the left flank of the division affairs took a different shape. The troops of the Fourth brigade, which at the start had rushed along the wagon-road with great intrepidity, when on line with the rolling ground running southeast from Hill 527, came under the fire of troops occupying the thickets and intermediate positions, and fell back in the direction in which they had advanced, to the meadow-ground near Alt-Rognitz. The view to the south of the wagon-road was obstructed, although just there the engagement appeared to have reached the utmost intensity. Suddenly the action at that point assumed a decidedly retrograde character also, and even hostile cavalry could be recognized coming on to the open ground north of the wagon-road, against which the hussar regiment advanced riding up the slope, but the distance prevented further details from being seen; this much, however, was certain: the attack of the left wing had utterly failed and the troops were falling back in the utmost confusion.

Lieutenant-General A—— at once galloped over to the left flank to restore the action there by his presence (2:25), taking a route north of Ridge 527.

COMMENTS ON THE CONDUCT OF THE DIVISION COMMANDER.

While issuing orders to his troops in action and observing their movements, the division commander must not lose sight of other necessary dispositions.

One of these is the care of the wounded. While the division surgeon attends to details, at the same time it is his duty to initiate or propose necessary measures. The commander is always responsible for the successful carrying out of such measures. In view of the character of the engagement, it is apparent that the dressing station established at Kriblitz was too far away to serve its purpose; moreover, one dressing station hardly seemed sufficient, on account of the dispersion of the division.

The following principle should govern in the choice of location for a dressing station: that the station should be located as near the troops as safety will permit, and with water

and a few suitable buildings available. If buildings are not near by, then tents should be taken from the portable equipment of wounded or fallen.

Considering the probable extent of the engagement, the necessity of a field hospital could be foreseen quite early; it was therefore correct to erect at the outset the first one available, and under circumstances then existing Kriblitz was the proper place for it. When another field hospital could be brought up, Trautenau was the place in which to establish it, as was actually done.

When the dressing station near Kriblitz was to be discontinued, all the wounded who could be transported should be taken to the field hospital in Kriblitz, while the necessary medical attendants and nurses for those not transportable should be left back. The rest of the personnel and matériel should be sent to the new dressing station in Alt-Rognitz, where all the medical officers of the troops, previously detailed for such duty, should also assemble. This could have been very easily done, as the main dressing station was combined with that of the troops.

The accompanying or transportation of the wounded to the dressing station by men who are able to fight must be forbidden under all circumstances as long as fighting is in progress; otherwise men would be too easily induced to withdraw from danger on such pretext. Not a single man able to bear arms can be spared before a decision is reached. Those who are but slightly wounded must drag themselves, unassisted, to the dressing station; those who are severely injured are carried there during an action by the litter-bearers and assistant bearers detailed for the duty; only when the fight is over should troops assist in this work.

To see that these injunctions are carried out, as well as to prevent similar disorders, it is recommended to provide for special supervision. Field gendarmes could be used for this purpose.

Near 1:30 p. m. the First division ordered its ambulance company to take station north of Hohenbruck, and the wounded were well cared for by it. The German flag and the Geneva cross were displayed at both dressing stations. The division surgeon directed affairs in Alt-Rognitz, while

the surgeon of the First infantry regiment was in charge of the troop dressing station in Hohenbruck.

Prisoners must be assembled in large bodies as soon as possible, and the escorts relieved and returned to their organizations. Orders must therefore be issued designating a common place of assemblage for all bodies of prisoners sent to the rear from the fighting line.

The change of station by the division commander was necessary to enable him to better overlook the ground on which the decisive assault must be made. He delayed the advance of the Third brigade for a few moments, as a few broadsides from the Sixteenth field artillery regiment would materially contribute to facilitating the assault. But when in the meantime the right wing of the Fourth brigade began its advance, he then gave orders for the Third brigade to start without further delay, so as to assure the simultaneous onset of all the forces of the division. It would have been easier, at that critical moment, to induce the division to advance simultaneously, by trumpet calls. But in action these signals are prohibited, with the exception of "Forward, double time," "Fix bayonets," and "Attention," which, however, would not have been suited to this particular occasion. The other signals are prohibited, for the reason that they might erroneously be taken up by troops they do not concern.

The unfavorable turn of events with the Fourth brigade presents one of those occasions where the superior leader feels it his duty to interfere personally. For this it is first of all requisite that he go to the spot. Yet he must also take measures to meet the consequences of the local misfortune, employing for such purpose the troops nearest at hand.

THE THIRD INFANTRY BRIGADE FROM 1:45 TO 2:25.

Shortly before 1:45 Major-General B——— had received a message stating that the First battalion of riflemen was advancing upon Hohenbruck, and at the same time he noticed the effect of the artillery of the First infantry division upon the tongue-shaped piece of woods near the highway. Under these circumstances he considered cover for the right wing no longer necessary, and directed Colonel D——— to put

the First battalion into action. Colonel D—— used the Third and Fourth companies, all he had left in close order, to strengthen his right wing at the moment when the attack was to be carried farther forward.

Soon after 1:45 p. m. Major-General B—— believed that the moment for the decisive assault had arrived, as at that time the whole of the Fourth brigade's most advanced line, as far as he could judge, had gone into action. He was just about to give the order to advance when his attention was called to the division commander who was approaching, so he first went to join Lieutenant-General A——. The actions of the two generals and events up to the issuance of the order for assault have already been described.

The assault of the brigade was after the following manner:

At 2:05 Major-General B—— gave an order to advance to the senior captain of the First battalion of the Second regiment, whose commander had taken charge of the regiment in place of the regimental commander, the latter having been wounded. The four companies, which had not yet been fired on, began to move in column of march at route step. As soon as this was noticed by the Eleventh, Sixth, and Eighth companies, which were in the second line, they advanced to the attack, with drums beating, and thereby induced the entire skirmish line of four companies to rise and rush forward. This took place under the protecting fire of the Fourth regiment, whose skirmishers had thrown themselves down after the first dash forward, and were firing.

This alternate advancing and firing by the two regiments took place without previous understanding. Upon the second rush the Ninth company of the Second regiment got into the thickets near Hill 527, and advanced at a walk to the southern edge, unseen by the enemy. The Fifth and Seventh companies reached the bottom of a deep hollow, which took them out of the opponent's fire, but prevented their firing. The skirmishers of the Twelfth company had therefore to bear the brunt of the defender's fire, and would consequently have remained lying down on Hill 527 had not the leader of the Eleventh company, which was immediately in rear, observed this, and, deploying his whole company forward, carried the Twelfth

company with it. The Tenth company, coming up, made use of this opportunity to take the place of the Eleventh and to connect with the battalion again. When the Fifth and Seventh companies had rushed up the slope and gone into action again, the enemy appeared to be completely shaken by the fire of six companies, as the Sixth company had in the meantime also deployed on the line.

It is true that the First field artillery regiment had ceased its fire upon the hostile skirmishers, the Second infantry regiment having approached too close; the enemy's skirmish line, however, showed great gaps, and the fire of the division artillery regiment, directed upon the ground behind it, prevented reinforcements being brought up. Meanwhile the firing efficiency of the Second infantry regiment had been greatly reduced. The severe exertion incident to running and throwing themselves upon the ground had, unfortunately, affected the pointing and aiming. A number of men who were not watched fired with sights at mid-range distance.

A large number of men who were exhausted were left behind lying down, besides the killed and wounded. In the meantime, when the skirmishers of the Second regiment noticed on the left the foremost line of the Fourth regiment crossing the last rise in the ground separating them from the enemy, and when the Tenth and Eighth companies, formed into line, approached the skirmish line, the entire line crossed the space to within 150 yards of the enemy, in three rushes, and the men threw themselves down; platoon and company leaders had drawn swords, while trumpeters and drummers were sounding the advance upon the hostile position, which they reached amidst loud hurrahs.

Only slight resistance was met in the enemy's line, which was marked by dead and wounded. In the large woods near Neu-Rognitz the fire of several hostile platoons was encountered. But the woods were also quickly evacuated as soon as they were entered by parts of the Second and Fourth regiments, completely mixed. The leader of the First battalion of the Second regiment, now regimental commander, who had joined in the assault on foot in the absence of his own horse, which was left back with the train, mounted the animal of a wounded rifleman and rode to the southern edge of the big

thickets, and halted the troops there so as to re-establish order and obtain a good view of what was further required. Very soon (about 2:25 p. m.) Major-General B—— also appeared, who, when advised of the fortunate result of the fight on the right wing, ordered the Second regiment to take Neu-Rognitz. The commander of the Fourth regiment, Colonel G——, then came up, and wanted to put in his entire regiment to change the unfavorable situation of the fight on the left wing of the division.

On the division's right wing, the First infantry regiment had not been able to seize the long stretch of thickets near the highway between Hohenbruck and Neu-Rognitz, with the same ease that characterized the successful advance of its sister regiment upon the big woods. To be sure, the long skirmish line formed by the eight companies had willingly followed the impetus for the assault given, according to orders, by the adjoining regiment on the left. But in the meantime the Sixteenth field artillery regiment on the Galgen Mountain had made an impression upon the enemy for a short time only, and as soon as the First regiment arose it was compelled to cease its firing. With the latter every condition was ripe for an attack upon an unshaken enemy of greater frontage. Although the deployment of the few remaining troops in support, and of the fourth company, carried the line forward twice, and the eighth company followed behind the center and the third upon the right, both in close order, yet when three or four hostile battalions advanced from the quarry for a counter-attack, it appeared doubtful to the regimental commander, who was on the right wing, whether such an attack could be repulsed.

Just at that moment (2:10 p. m.), however, the matter assumed a different aspect, for the ever-watchful batteries of the Sixteenth field artillery regiment directed their fire upon the assailing opponent, and the horse battery, hurrying out of Hohenbruck, opened upon the hostile battalions at 1,000 yards. They hesitated, threw themselves down, and fired, while at the same time the First cavalry brigade and the Fourth squadron of the First regiment of hussars attacked the hostile infantry on the left wing and flank. Simultaneously the First battalion of riflemen came into the open ground to the south out

of the western part of Hohenbruck. The gallant forces of the enemy were completely overthrown, and though several companies resisted the attack of the cavalry, finally the entire mass, some in order and some dispersed, streamed back in the direction of the quarry and highway.

The leaders in the skirmish line of the First regiment availed themselves of the opportunity thus afforded to approach nearer to the thickets on the highway, and when they arose, at a distance of about 500 yards, for a fresh advance, the hostile skirmish and artillery fire became silent and the opponent was seen leaving his position. Shortly afterwards a hurrah was heard on the left, which indicated that a decision had been reached in the center too. At 2:25 the right wing of the First regiment reached the quarry, and its left wing came up to the southern point of the tongue-shaped piece of woods; the mounted battery had also arrived, and the First cavalry brigade and the Fourth squadron of the First hussars were assembling near the thickets north of the quarry. The enemy's infantry was seen disappearing in the ravine and woods west of Neu-Rognitz.

COMMENTS ON THE ATTACK BY THE THIRD INFANTRY BRIGADE (1:45 TO 2:25).

The success of the attack is to be attributed principally to the complete fire preparation by the infantry and artillery and by issuing of orders to the assaulting troops. The hostile artillery was almost completely put out of action, and the enemy's counter-attack was neutralized by the co-operation of all three arms on the extreme right wing, the cross-fire of 42 guns making their position almost untenable. In spite of this, the defenders not only held out until assaulted, but even checked the frontal attack for some moments. The decision was finally secured by the flanking movement of the cavalry and horse battery upon the right wing of the brigade.

It cannot be determined who gave the impetus for the latter part of the assault. Major-General B—— labored under the erroneous impression that the First infantry regiment still had a battalion in close order at its disposal on the right wing. As it was, only 2 companies were thus avail-

able, and it would have been advisable to have asked the battalion of riflemen to take part in the action at an early moment. Major-General B—— can, however, hardly be held responsible for this incomplete knowledge of conditions on the right wing; it was rather the duty of the commander of the First infantry regiment to keep him informed with regard to the situation there. For delivering such information mounted riflemen should be employed.

The regimental commander and his adjutant dismounted in the midst of the heavy fire from the opponent. The control and observation of the fight demanded their entire attention. In such cases it is a great help if every half-hour a mounted rifleman inquires whether there are any messages to be sent. A more exact knowledge of the difficulties on the right wing on the part of Major-General B——, even if it did exist, could not have delayed the initiation of the decisive advance, as in the center the time was so ripe that only an order forbidding assault could have prevented an attempt to storm the hostile position. The skirmishers of the Fourth regiment ascended the undulation in the terrain, and independently, without awaiting orders, the foremost line of the Second regiment joined them. Here the leaders of the skirmish line of this regiment gave proof of their training for tactically regulated independence. The regiment could neither expect nor receive orders. There was no general leader for the line, which was divided into small subdivisions of varying strength, and if one or more of these should remain back, the advance would lack its united character and might miscarry.

The beating of drums made it plain to all that this independent but united assault of the skirmish line was in accordance with the plan of the combat, but it is questionable whether the beating by all the companies of the Second and Third battalions of the Second regiment that were yet in close order, was seasonable. Regulations state on this point: "With bodies in close order drums will sound from the moment the assaulting movement can no longer be hidden from the enemy." The Sixth and Eleventh companies on the crest of the ridge were visible to the enemy, while the other company was sheltered by a rise in the ground. The somewhat premature beat-

ing was, however, immaterial in this case, as the commencement of the attack could no longer be concealed. In covered terrane or woods a premature beating of drums would have certainly been a mistake.

The companies of the First battalion of the Second regiment remained in column of march. For disciplinary reasons we will generally form platoon column as soon as a company enters the enemy's fire. Here, however, the troops were no longer exposed to the subdued artillery fire, and the narrow squad front furnished only a small target for infantry fire. The Tenth company, which had returned from its detached mission, made its way in platoon column to the second line, and this rightly, too, so as to be with its battalion during the assault. Some of the companies of the second line deployed, while others formed into line, so that at the most the enemy's missiles would take effect on two men (one behind the other) instead of six.

These examples illustrate how subordinate leaders may resort to the most varied measures when handling a body of troops during an attack; they also illustrate what demands must be made upon their circumspection and dexterity. Brigade and regimental commanders cannot trouble themselves with such details; they must concern themselves with giving the direction of march and maintaining cohesion, and even cohesion cannot be assured unless the subordinate leaders are fully convinced that it is their duty also to strive at all times to keep their troops well connected with the mass of the organization, for the accomplishment of which it is necessary whenever practicable to concentrate the men in the most suitable formation and re-establish the connections between echelons where the same has been disturbed.

As for the skirmish line on the side of the aggressor, regulations prescribe that it must be divided into strong swarms of skirmishers, and must gradually work up to the position of the enemy. No rules are laid down as to whether, in the decisive charge, the rushes shall be made by platoons, companies, or battalions. But in this engagement, where the opponent appeared to be subdued for the time being, the action of the Second regiment in advancing its whole skirmish line simultaneously must be approved, the more so as the regiment

on its left was lying down firing, though later, when the defensive fire partially revived, it would have been advisable to make the rushes by battalions. According to Drill Regulations, the length of a rush should seldom exceed 100 paces. Here the skirmish line was 650 yards from the enemy, and yet it took about 15 minutes to change to assault at close distance. Over this undulating ground, 100 paces could not have been covered in a single rush, for in places the advance could only be made at a walk. Besides, on account of the heat, as well as the character of the terrain, a long pause was needed after each dash to get breath, and during the pauses it was necessary to keep the enemy quieted by continuous fire.

A mutual fire support was especially favored by the fact that in closing up toward the front the Second and Fourth regiments were advancing upon the salient point of the hostile position. The diagonally sweeping fire before the front of each regiment made up for the absence of cover and did not allow the opponent calmly to reply. The strengthening of the skirmish line on the part of the defenders by bringing up reinforcements led to severe losses for the enemy, and exemplifies the principle that a position once selected must be occupied densely with skirmishers when attacked, as the gradual filling in with troops when under the assailants' fire deprives the defense of the advantage of a calm and superior fire-development.

In the case of the First infantry regiment the attack was made more decidedly difficult by the regiment's lacking the necessary depth. In order to carry forward at least a part of the skirmish line, a few bodies in close order had to be brought up and deployed. The two companies (Third and Eighth) that were available to the last could hardly have exerted any animating influence upon the assault, and it was therefore very fortunate that the other arms were attentive and took part promptly and without hesitation. When their own cavalry approached, the skirmishers took advantage of their opportunity to get nearer to the enemy, and were entirely right in doing so.

As already remarked, the interposition of the cavalry and horse battery was very fortunate. As regards the battery, it may seem strange that it should take half an hour for it

to appear south of Hohenbruck after leaving its position at the Galgen Mountain (1:45 p. m.), a distance of 1 mile, including its detour. But it must be remembered that the highway was encumbered with all kinds of vehicles, and north of the village the sunken road was blocked with cartridge-wagons which had been sent ahead from the advance guard of the First infantry division. Frightened villagers were trying to reach Trautenau, and in their midst requisitioned wagons were carrying wounded to the hospital. The battery was therefore much delayed in crossing the highway. Next, a suitable road must be found through the western part of the village, and with the help of the squadron of the Fourth hussars such a road was finally opened. At any rate, the battery leader is deserving of commendation for his attempt to accompany the infantry attack at close distance.

On this point Drill Regulations for Field Artillery are very clear, and prescribe as follows: "To facilitate an infantry assault, the advance should be accompanied by single batteries up to the nearest effective distance. The strengthening which an attack receives, especially in its moral relations, by such accompaniment, will richly balance the losses of any artillery connected therewith." The horse battery was naturally in considerable danger, and could have been lost had the hostile counter-attack succeeded. But even in such a case "a fearless stand must be made until the last moment; and if this should lead to the loss of the guns, it will be considered as meriting the highest honor."

At all events, the battery would have found reliable support from the First cavalry brigade, of whose presence it had been informed by the Fourth squadron of hussars.

In accordance with the injunction never to wait for an order to attack, Major-General L—— (First cavalry brigade) resolved to make an assault as soon as he saw the hostile infantry move out from the direction of the quarry; he also advised the Fourth squadron of this move. The more room he allowed the enemy to gain toward Hohenbruck, the more securely could he grasp his flank. The boundary for the left wing of the attack was, however, the sunken part of the Hohenbruck-Sorge road, midway between the two villages. Although the brigade had been posted in hiding behind

Hill 414, when its leading squadrons crossed the height they could be seen a little less than a mile from the enemy's position. Still less could the brigade avail itself of an opportunity for surprising its opponent on account of the steepness of the hill, which made it necessary to go part of the distance at a walk. Three squadrons of uhlans attacked in the first line, with one squadron following at 150 paces as second echelon; the cuirassier regiment made up the third line, giving the attack the requisite depth. It succeeded completely, the left wing of the hostile skirmish line being turned and some closed platoons even cut down. The incapacitating of some of the uhlans by the fire of the infantry on their own side was unavoidable; in the heat of the action the foot soldiers simply failed to notice the charge, and continued their fire. The pursuit by the First cavalry brigade naturally came to a halt at the big woods, and upon the sounding of recall the uhlans and cuirassiers assembled behind their squadron leaders.

It was not alone the cavalry who paused the moment the enemy's position was taken. The First infantry regiment was so exhausted, had suffered so severely, and was in such confusion, that before penetrating the woods west of Neu-Rognitz a halt for the purpose of reorganizing was indispensable. Likewise the Second infantry regiment, which also re-established order before entering the village. A pursuit by fire was soon brought to an end by the covered condition of the terrane.

THE FOURTH INFANTRY BRIGADE FROM 1:45 TO 2:25.

Howsoever ardent the desire exhibited by the Third battalion of the Fourth infantry regiment to push forward, it had not greatly distinguished itself by making its fire felt by the opponent. It was this battalion, standing in the bottoms under infantry fire at 1:45, that attempted to reach the crest of the rising ground in front, so as to develop the full power of its own guns. The battalion was able to make this forward move without serious loss, as the men upon the projecting slope were covered at least breast high, although the skirmishers of the Sixth company, who advanced at the same time, suffered severely, as they found only slight cover in the terrane, and although the men of the Seventh company, who

had previously deployed, were very soon obliged to lie down (a measure very sensibly resorted to also by the deployed Tenth, Eleventh, and Twelfth companies). What rendered this lying down more particularly opportune, however, was the fact that at the same moment the Second regiment also began to advance, and needed fire support. The leading line of the First battalion likewise availed itself of this support, moving forward on line with the other battalions, either stooping or crawling. Although the Fourth regiment had commenced the decisive assaulting movement earlier than the regiment on its right, and had removed knapsacks, later it became possible to join the final assault with the Second. At 1:45 the Fourth regiment was about 200 yards farther from the enemy than was the Second, but yet the assault took place elbow to elbow. At the finish only one company of the Second battalion (the Eighth) and one of the Third (the Ninth) were in close order, and with these the battalion commanders remained. When the depleted skirmish line descended into the last depression before the enemy, and could make the ascent for the assault only at a walk on account of the steepness of the slope, the Eighth and Ninth companies delivered volleys across the depression to keep down the defenders. Upon breaking through the hostile line the companies of the Second and Fourth regiments became badly mixed; everybody rushed into the big woods; the Third battalion had lost the direction of march, as the hostile batteries, upon which the left wing had been directed, had moved away. At 2:25 p. m. the regimental and battalion commanders, assisted by their subordinates, were engaged in unraveling this confusion when Colonel G——— was called away to the First battalion of the Fourth regiment, which was apparently falling back.

The First and Second battalions of the Third regiment had not met with much success. As already stated, the commander of the Second battalion had a very severe fall, and soon after 1:45 the regimental commander had been wounded while he was in the outskirts of Alt-Rognitz. At the most trying moment, therefore, the battalions were without a common leader. The First battalion had just received orders to carry the other forward to the attack, and as its commander had no idea of the state of the engagement, he

proceeded to deploy all four companies into those of the Second battalion, thereby forming a mixed, almost unmanageable line, which advanced by companies to within 900 or 1,000 yards of the enemy, suffering from the fire of the troops that remained behind lying down, and finally, after using up their aggressive force and finding little cover in the terrane, entered upon a containing fire fight astride the wagon-road and about on a line with the farm-yards near the sunken way.

On his right wing the enemy confined himself wholly to defense, except that some companies of riflemen singly entered the covered region near the creek which runs toward Rudersdorf, and annoyed the left wing of the Third infantry regiment most severely by their accurate fire at short range; and about 2:20 p. m. from 3 to 4 squadrons of hostile uhlans were seen farther to the east along the creek, which they crossed and then seemed to form themselves for attack. The left wing of the Third regiment, which was now partially without leaders, rallied in groups, and, unable to stand the losses by rifle-fire incident to such a formation, slowly fell back upon Alt-Rognitz. Gradually the entire skirmish line joined in this retrograde movement, since bodies in close order were not at hand. Most of the leaders had been put *hors de combat*, and in the turmoil of the fight the few who still remained were able to control only the men in their immediate vicinity.

The commander of the First battalion of the Fourth regiment, while pushing forward against the hostile position out of the woods farthest to the north between the two foot-paths, noticed this retrograde movement and the heavy loss caused by the enemy's pursuing fire. He accordingly directed his skirmishers to open fire upon the enemy's right wing, adding the Fourth company to the foremost line for this purpose; but noticing the Fourth company forming a hook to the rear and apparently falling back, he dashed out of the big woods already captured and hastened up to the company to start it forward again, when he received a shot from the hostile skirmishers lying along the southern foot-path, and was killed. And as the brigade commander was wounded while vainly attempting to give the proper formation to the two battalions of the Third regiment, the wing was deprived of all higher

command, and a complete repulse would probably have resulted had not the Third battalion of the Third regiment come to its assistance of its own accord. This battalion had been ordered to follow behind the center of the Fourth regiment, but after marching for a time in the shelter of the street of Alt-Rognitz, it had gone a little too far beyond the northern foot-path, and was fortunately behind the left wing of the leading regiment. When the leader of the Third battalion perceived the dangerous situation of the two other battalions of his regiment (Third), without hesitating he deployed 3 companies between the left wing of the Fourth regiment and the retreating skirmish line of the Third regiment, in position for support, and so kept off the opposing troops that were advancing from the creek. This measure met with the full approval of the division commander, who galloped up at the same moment, being there rejoined by the aid sent to the left wing. Lieutenant-General A—— then ordered the First battalion of the Fourth regiment and the Third battalion of the Third regiment immediately to resume the advance, and a large portion of the two other retreating battalions also joined in this renewed forward movement.

The division commander directed that other troops which were listlessly going to the rear be stopped by a squadron of hussars in line, collected, and led back into action. The hostile uhlans abandoned their attack when they saw 2½ squadrons of hussars riding out of Alt-Rognitz. At 2:25 p. m. the entire left wing was on the advance, and as in the meantime the big woods north of Neu-Rognitz had been seized by the center, and the counter-attack instituted by the enemy on his own left had been repulsed, the thickets between the northern and southern foot-paths were also deliberately evacuated.

COMMENTS ON THE ATTACK OF THE FOURTH INFANTRY BRIGADE (1:45 TO 2:25).

The attack covered a period of 40 minutes, during which all the battalions were engaged. In view of the course the contest took and the character of the ground it covered, we will hardly be too high in estimating the loss at from 1,000 to 1,500 men.

Yet we must be prepared for such losses as these, for of far greater consequence would have been the failure of the attack by the left wing. We must also clearly understand the causes that led to this unfavorable result.

Considering the position occupied by the enemy opposite the left wing of the Fourth brigade, we are justified in asserting that an attack carried out in the manner here adopted had little prospect of success. We only enter a field of attack similar to this, when there is no possibility of getting at the enemy in any other way, or the general conditions absolutely require it. It furnished scarcely any cover; toward the east and in front of the left wing of the Third regiment it terminated in meadow thickets that were sufficiently high to obstruct the view, and during the final stage of the assault it necessitated a movement of 550 yards up a glacié-like slope. The blame for having undertaken the attack over this terrain with such limited means, does not rest upon the regimental commander alone, but especially upon the commander of the Fourth brigade, who had drawn the regiment too far to the left and then failed to provide connection to the right with the Fourth infantry regiment; and without sufficient depth, and isolated, the First and Second battalions of the Third regiment went to pieces.

The leading was also very unfortunate in minor details. The battalions initiated their attacks almost without any fire preparation, and as the division artillery could not play upon that part of the field, it was all the more the duty of the infantry commander to develop his whole fire power from a distance. But instead of this, a planless frontal attack was begun, which, although demonstrating the gallantry of the troops, could never lead to the goal. At the very outset two battalions were intermingled, a measure that made leading an impossibility. Advancing in densely crowded skirmish line, the attack was without depth, and offered the opponent an excellent target at long range. The gallantry of single companies rushing forward could not prevent the failure of the attack, which, robbed of all support from the rear and of all higher supervision, required but a slight check to throw it into utter disorder.

To this must be added, that the point of march direction was established too far to the left, and thereby disrupted all connection with the Fourth regiment.

The responsibility for deficiency in depth rests also in part on the division commander. If the latter had desired to retain a battalion at his disposal, it ought not to have been taken from the regiment which should outflank the enemy, but from a regiment in the center; and if a reserve battalion was also necessary for the frontal attack, it would have been better to have selected the First battalion of the Second regiment, while the Third battalion of the Third regiment would in all probability have given an entirely different effect on the left wing as it followed long after the other parts of the regiment.

The shock that turned the advance of the First and Second battalions of the Third regiment into a retreat was very slight, merely the appearance of a few hostile squadrons on the left flank. But as no bodies in close order were at hand to protect the flank, the skirmish line was certainly greatly menaced. To seek protection against the threatened cavalry attack by rallying in compact groups was, however, a grievous error, to be ascribed to the absence of leaders, and could only result in serious losses, as these groups were exposed to the relentless fire of the hostile infantry. All that could have been done under the most unfavorable circumstances would have been to wheel the extreme left of the skirmish line backward, and permit threatened skirmishers to face about and fire. The appearance of the $2\frac{1}{2}$ squadrons of husars along the southern edge of Alt-Rognitz was timely, and warded off the attack.

The retreat of the First and Second battalions of the Third infantry was checked solely by the independent interference of the Third battalion. It had been instructed to follow as reserve in the center of the Fourth regiment. Its leader nevertheless independently led it to the point where its help was required. In such contingencies we must not wait for orders. The first deployment of the battalion was conceived as a movement in support, and the commander was consequently entirely right in employing a large force (3 companies) at the outset. The supporting position was intended

to facilitate the retreat and effect a gradual disengagement from the enemy. In this case, however, that purpose was finally abandoned and the attack resumed, as it was seen that the enemy did not follow. Every means possible were to be employed to induce the other parts of the Third regiment to face again to the front and take part in the assault. Crises such as these are the most difficult that we encounter, and can be met only by the examples and energetic interference of officers; and even these will indeed be valueless if losses and events have so blunted the spirit of the troops that only physical resistance, such as the riding of cavalry against them, can bring them to a halt.

But little need be said regarding the Fourth infantry regiment; in it nearly everything passed smoothly. The premature start to attack, however, resembled a runaway to the front. Such a breaking away out of the general position at an improper moment is a gross error; but here it occurred at the moment for the general attack, the commencement of which was intended to be marked by the Second regiment, and so did no harm. The Third battalion of the Fourth regiment committed another error when it cast aside the direction given it and crowded too far to the right. The faulty designation of the point of direction was, however, to a great extent responsible for this, as it was given upon the enemy's batteries at the extreme right; but the hostile artillery withdrew while the attack was progressing, and the point of direction thus disappeared, so that the Third battalion inclined toward the big woods, instead of the center of Neu-Rognitz as it should have done. The subsequent mingling with the Second battalion and the Second regiment was in itself no great mistake; such mingling can never be completely avoided when closing up for an assault. Nevertheless it delayed the restoration of order and made the leading more difficult.

One of the dispositions made by the Eighth and Ninth companies deserves especial attention. We refer to the volleys fired over the heads of their own skirmishers in the depression in front. Unless leaders have firm control of their troops, this is a hazardous measure. But skirmish fire would have been too dangerous, as it is often difficult to stop it in the heat of action, which was to be done when the skirmish-

ers in front began to ascend the slope toward the enemy. The only advantage of volley fire in this case lay in the assurance it gave that the fire could be discontinued at any moment. It was also applicable in the sense conveyed by regulations, because the Eighth and Ninth companies were not under effective hostile fire. Except for such situations as these occurring while a battle is actually in progress, the Regulations recommend volleys only at the beginning of a fight.

GENERAL RETROSPECT.

The Second infantry division attacked under favorable conditions; the ground in part facilitated the assault, and the defenders were inferior in number. Yet it was not achieved without reverses.

As for the defenders, it must be admitted that their conduct in accepting the attack while isolated was extraordinary. But such situations occur in every campaign, and may be explained when the weak opponent, while standing his ground, expects help at every moment, or has erroneously estimated the relative strength. Weissenburg and Spicheren are prominent examples of this in the campaign of 1870-71. In the former General Douay stood his ground because he underestimated the numbers of the German forces, and when he wanted to withdraw, he could no longer disengage his troops; in the latter engagement General Frossard counted positively on the assistance of four divisions. Both these leaders acted upon the basis of erroneous suppositions, and both were beaten. Why should not a strong mixed brigade therefore accept attack when it may soon be reinforced? Only a few minutes may be calculated as necessary before help will arrive, and still, in this case, the defenders may have made a mistake.

At all events, the prompt and resolute action of the Second infantry division found its reward, in that the opponent was overthrown before the expected help arrived.

Several general rules may be deduced from this attack by an isolated division. The division did strive to outflank, but it did not succeed. The frontal extent of an attacking division is reckoned at 1 mile; here it was over $1\frac{1}{2}$ miles, for the sake of a flank movement. In any case, even the front in a

flank attack must be governed by the fact that in some places the attack must be formed in depth. In this case the question as to where the depth formation should be established, in the center or on one of the wings, was determined by the character of the terrain over which the main attack was to be conducted. The artillery must always act against the point of penetration, and the division commander is responsible for seeing that this is done. In brief, his duty embraces the following general points: deploying the advance guard for the protection of the artillery; taking of position by the artillery; reconnoitering for the infantry attack; posting of the main body of the infantry; issuing the orders for the attack.

If in this case everything did not proceed according to rule, it was because an unpremeditated engagement developed into an attack against a position.

Long-range firearms require that the attack be formed and initiated from afar, but after the attack is once started, it goes straight ahead. If a formation is once neglected, it cannot be restored later on (as, for example, with the Third regiment of infantry). The decision itself lies at mid range, and all that the order for approach can have in view is the posting of the infantry as propitiously as possible at mid-range distance, to subdue the opponent by infantry fire. But when artillery and infantry fire is combined to break up the hostile line of defense, the main body of the assailing troops must also be led against that line. The latter part of the assault, the advance at close range, may be made without serious loss if the enemy has been subdued, and may be facilitated by fire from neighboring troops. Should, however, the losses begin to increase by reason of a renewal of energy on the opponent's side, then the attack must be kept up by the deployment forward of the troops hitherto following in close order. Standing still at close range is a sign of the imminent defeat of the assailants. The defenders are not shaken by fire alone, but also by the threatened advance of the assailants while they are being steadily reinforced. When the hostile position has once been taken and the pursuing fire is over, the main issue then becomes the assembling and re-formation of the victorious troops.

It is much easier to lead an attack if the parts are formed up by wings—*i. e.*, when men in the rear striving to reach the front belong to the same regiment as those on the firing line. The simultaneity of an assault is not indicated by hurrahs resounding simultaneously from all parts engaged, but on their synchronous action for the common purpose. In the engagement just described all the troops were in action either during the assault or in the warding off of the counter-attack. The entire division was engaged, no part being held back.

In the end it is important to put in every man without reservation; in this the will to conquer manifests itself. The necessity for the support of the commander by a multitude of independent resolutions and actions by subordinate leaders arises out of the impossibility of making inquiries, the demanding or awaiting orders for every eventuality, the distances, the sweep of bullets, and the unavoidableness of the commander's remaining permanently in a certain place, whereby he cannot be in every place. On this point the introduction to Field Service Regulations says distinctly: "Without thought of responsibility, every officer, under all circumstances, even the most extraordinary, must let his individuality be felt in the highest degree in whatever he attempts to do, and even without awaiting specific orders;" also, "every one, from the commander-in-chief down to the lowest-ranking private, must always remember that omissions or neglect constitute a more serious fault than errors in judgment."

EVENTS TILL THE RETREAT OF THE ENEMY.

(2:20¹ TO 4 P. M.)

As Lieutenant-General A—— accompanied the left wing of the division he was struck by the complete intermingling of the men of the First and Second battalions of the Third infantry regiment. These troops he stopped near the farm-houses along the wagon-road, and, meeting the commander of the First battalion, directed him to restore order.

When the general had convinced himself that the enemy had abandoned all resistance in the position hitherto occupied

¹The period from 2:20 to 2:25 has been anticipated in the preceding chapters for the purpose of preserving connection in the narrative.

by him, except in the woods south of the wagon-road, and no new hostile forces appeared, and also saw that the measures he had taken to restore order were progressing, he began to consider what further dispositions were needed.

After brief reflection, he despatched his second-ranking aid to the commander of the Third infantry brigade, after giving him the following instructions: "Tell Major-General B—— to follow up the advantages gained and make every effort to obtain possession of Neu-Rognitz; then find the corps commander and report to him the state of the engagement on the left wing. I shall again direct the Fourth brigade against the thickets south of the wagon-road when order is finally restored."

Next he sent another staff officer to the north of Alt-Rognitz, via the church of St. Paul and St. John, to find the Guard division and report the following to its commander: "The right wing of the Second infantry division has defeated its opponent and advanced along the highway, but an attack of the left wing against the thickets along the wagon-road has been repulsed. I am about to initiate a new attack. I would be pleased to have the support of the Guard division on my left wing, which could be best accomplished if it would push forward upon Staudenz via Rudersdorf." (2:45 p. m.)

After this, Lieutenant-General A—— proceeded to reorganize the command of the Fourth brigade. It was found that its commander, as well as the commander of the Third regiment, was unable to take part in the fight again, and that the commander of the Fourth regiment had fallen. The command of the brigade therefore devolved on the senior field officer, Major Z—— (Third battalion of the Third regiment), with whom the general had just been talking near the little thicket, and who was readily found and brought up. He gave Major Z—— the following instructions at 3 p. m.: "You will take command of the brigade until further orders. Push forward the two battalions of the Third regiment now assembling, in a flanking position toward the northeastern point of the most advanced thicket near the wagon-road, for the further execution of the attack. Have the other battalions advance promptly upon Neu-Rognitz."

The general then repaired to the point where the southern foot-path crosses the ridge coming down from Hill 527, but the numerous shots of the enemy reaching there forced him to retire behind the line of the crest of the ridge. From that position he was able to clearly observe the slowly progressing engagement of the Third brigade and the field of attack of the Fourth brigade, and at the same time assist in restoring order in the latter. The fact that this took place in his own presence exerted of itself a beneficial influence.

Even at the outset the First battalion of the Third regiment was certainly a very small force, not many more than 300 men; the Second and Third battalions had also melted down considerably; nevertheless, they still formed three units of command, of a total strength of 1,600 to 1,700 men.

The further progress of the engagement as it was enacted before the eyes of the division commander was as follows:

While these dispositions were being made in the Fourth brigade, the fight at Neu-Rognitz did not at the start progress very well. A struggle was still going on for the possession of the northern portion of the village, and apparently also on its west side. Hostile troops did not re-enter the terrane east of the village, and the fire which had started in one of the farm-houses was rapidly spreading, and a part of the southern portion of the place was already in flames.

The First battalion of the Fourth and the Third battalion of the Third regiment advanced between the northern and southern foot-paths, towards the eastern boundry of Neu-Rognitz, while the two other battalions of the Third regiment turned toward the woods near the wagon-road. A general staff officer coming from corps headquarters announced that in view of the victorious advance along the highway the corps commander had halted the First infantry brigade, which was already engaged in an advance south of Hohenbruck, in order not to involve too many troops in the fight.

He was directed to recommend to the corps commander that an advance of a fresh force west of the highway would probably facilitate the engagement very much, and that it was all the more desirable to make rapid progress there by reason of the fact that the left wing had so far gained little ground, and had already suffered severe losses. An immedi-

ate support of that wing did not seem necessary, in view of the approach of the division of the Guard corps.

... Meanwhile the batteries of the First regiment of field artillery had left their position between Kriblitz and Alt-Rognitz, and the First battalion was about to issue from the sunken road east of Hill 460 while the Second was trying to find its way through the northern part of Alt-Rognitz. The regimental commander had ridden ahead and met Lieutenant-General A—— at 3:10 p. m., who ordered him to occupy a position in readiness upon Hill 527, because the pursuing fire could not be initiated before Neu-Rognitz was completely occupied. The Fourth and Fifth batteries, which had arrived first, were directed to fire for some time upon the thickets near the wagon-road.

There, upon the extreme left wing, the engagement had meanwhile become more fierce. Major Z—— was accordingly directed to employ more of the brigade at that point. He even succeeded in turning the Third battalion of the Third regiment in that direction, while the First battalion of the Fourth regiment penetrated the eastern boundary of Neu-Rognitz. Toward the southeast artillery fire was audible. Portions of the Guard must already be there and participating in the action, although it appeared strange that no officer had arrived from the Guard division for the purpose of arranging details. In this connection it had, however, been rumored among the staff that a short time before several red hussars had been seen in the vicinity, who could only belong to the patrols of the Guard division. As the aid previously sent had not yet returned, the general despatched his senior aid, with some mounted riflemen, in the direction of the artillery fire, to obtain information with regard to conditions there.

Soon the Third regiment succeeded in forcing its way into the woods south of the wagon-road, and at 3:25 p. m. the First battalion of the Fourth regiment rushed into the village near the spot where the southern foot-path enters.

The fighting was now fierce only in the furthest portion of the village. In order to have a reserve on the outside, the division commander, who had personally assisted in assembling the Second and Third battalions of the Fourth regiment, directed both battalions to move up to the eastern boundary of the big woods north of Neu-Rognitz.

At 3:25 he rode across the southern foot-path to the wagon-road near the edge of the village, where he met the chief of staff of the corps, whom the corps commander, who had meanwhile taken post near Hill 527, had sent to discuss the situation and communicate his wishes.

This officer first of all informed the division commander that corps headquarters had already received a message showing that the First infantry division of the Guard, advancing from Rudersdorf upon Staudenz, had encountered only weak hostile forces; further, that the corps commander therefore intended to discontinue the frontal engagement as soon as a proper position was reached, unless an especially favorable opportunity should present itself, as otherwise, in consideration of the general situation of the army and the possibility of a march upon Arnau, he would not extend the attack beyond the line of Neu-Rognitz. The First infantry division and the corps artillery occupied a position north and south of Hohenbruck.

It was finally agreed that as soon as Lieutenant-General A——— had completely cleared Neu-Rognitz of the enemy, he should content himself with holding that point. He also considered it necessary to obtain possession of the big woods southeast of the village, but in order to avoid needlessly heavy losses he would delay the attack until the influence of the Guard could be perceptible. The assistance of the entire division of the Guard could, however, not be counted upon, as just at that moment the aid who had been despatched to the Guard division returned, reporting that only its advance guard, consisting of 4 battalions of infantry, 3 batteries, and 3 squadrons of cavalry, had deployed about three-quarters of a mile south of Rudersdorf, while the main body was yet far behind; but that all of its parts had taken up direction toward Staudenz.

Hardly had the chief of staff left, when it could be plainly seen (3:45 p. m.) that the hostile forces opposite the Third regiment were abandoning the wooded terrane south of the wagon-road. Major Z——— was at once directed to start in pursuit, inflicting all damage possible on the enemy; he was, however, cautioned not to advance beyond the southern edge of the woods lying in front.

Before the offensive advance could be continued upon this wing, the opponent also left the hitherto stubbornly-held southern portion of Neu-Rognitz. The division commander, as we have seen, had approached the village, and was met there by Major-General B——. The latter reported that his brigade had experienced a hard fight and lost heavily, but that it had succeeded in forcing the enemy into a decisive retreat, and that the last resistance in the village had finally been overcome by the Second regiment and the First battalion of the Fourth regiment; he furthermore expressed the opinion that an advance beyond Neu-Rognitz was at that time impracticable, as the enemy occupied Hill 635, lying to the southwest, with a strong force of artillery, and as the wood west of the village was not yet completely in the hands of the brigade. In consequence the brigade commander was instructed to firmly establish himself in the village, first of all restoring order in his command. (3:52 p. m.) At the same time the horse battery was observed firing in a southerly direction from the quarry.

At 4 p. m. the main object of the engagement seemed to have been accomplished. On the whole, it was a victory for the Second division, the only question yet unsettled being how far the pursuit should extend.

COMMENTS ON THE ATTACK OF THE SECOND INFANTRY DIVISION FROM 2:20 TO 4 P. M.

The necessity of Lieutenant-General A——'s hastening to the left wing and assuming command in person there has already been carefully dwelt upon. In such a decisive moment the following points must generally be observed: Arrest of retreating troops and taking of steps to avoid further disadvantages incident to defeat, especially if the enemy is in hot pursuit; re-establishment of order and of the relations of command, possibly disarranged by losses; measures regarding resumption of the previous objects of the engagement, or the pursuance of other intentions.

On the whole, Lieutenant-General A—— performed all these duties. He was therefore correct, after the repulse of the few pursuing hostile bodies, in ordering the First battalion

of the Fourth regiment and the Third battalion of the Third regiment to go forward again, and the two shaken battalions of the Third regiment to go to the front again in connection with them. It was nevertheless a venturesome move, for if this united attack of the left also went to pieces, the brigade could hardly have looked upon its day's work as successful.

A fresh advance must take place as soon as possible; this was necessary, if it was intended to utilize the force at hand. The division commander had quickly recognized the correct point for the attack; he discovered it in the foremost thicket near the wagon-road. Before this was seized an advance against the east front of Neu-Rognitz could not be carried out. Unfortunately, no artillery preparation had been considered, as the difficult terrane had seemed to make it impossible for the batteries to come up. But the capture of Neu-Rognitz would soon menace the flank of the enemy at the wagon-road, and force him to abandon the woods.

Although the division commander interposed in the leading of the brigade to a greater extent than would have appeared proper under other circumstances, he was justified in so doing by reason of the disturbance in the relations of command occasioned by the losses suffered, as well as by reason of the fact that an independent issue was being fought out by Major-General B—— on the right wing. Further, the division commander was contented with giving only general directions to Major Z——, in the various phases of the attack, without allowing his attention to be diverted from events in the other brigade.

It is a question whether Lieutenant-General A—— should have more carefully considered the dispositions to be made by the Fourth brigade, before the first attack was made; its advance would certainly then have taken a different course. But we must not judge by events alone. The general was concerned in leading the entire division, and he could not tell beforehand where his presence would be most needed. Both brigades had dangerous obstacles to overcome. At any rate, the incident shows that we should not confine ourselves merely to the issuing of orders and general supervision of their execution; but, under certain circumstances and where time and conditions permit, the manner of carrying out these in-

structions should be discussed with subordinate commanders. For instance, if the division commander had been with Major-General C—— before the beginning of the first attack, he could have issued positive instructions for taking the furthest thicket near the northern foot-path as point of direction for the center of the brigade, and the extension south of the wagon-road would have been avoided.

But such an interference on the part of the division commander in proper time and at all important points was impossible. The space occupied by the division was much too large for this. In Part II. we have called attention to the fact that in an attack a division's frontal development should not be much over a mile, if we would assure orderly direction and energetic co-operation; but in this case the division's line of fire was over a mile and a half long, measuring from the farm-houses near the wagon-road westward to the highway near Hohenbruck. *Mutual support* in a concentric advance, it is true, might have been possible; nevertheless the Third brigade was not in position for the *immediate support* of the Fourth. Therefore the division commander, as soon as the thicket near the wagon-road was taken, moved two battalions (Second and Third of the Fourth regiment) of the Fourth brigade, as a reserve, to the eastern boundary of Neu-Rognitz, where they were in a position to give timely support in any direction, as the extension of the division was then reduced to 1 mile; furthermore, on a covered terrane over which the fight is still progressing, decisions are not reached as quickly as upon a plain.

The first thing the division commander directed Major Z—— to do, as he made his further dispositions, was to advance with a strong force against the position the enemy had occupied south of the wagon-road. Undisputed possession of Neu-Rognitz would certainly not have been secured until the enemy was forced from the woods southeast of the village. This might have been accomplished more certainly and with smaller loss if the attack had been brought into intimate relation with the expected flanking of the opponent by the Guard corps. But as soon as the withdrawal of the enemy became apparent there was no further reason to delay the advance; on the contrary, a sharp pursuit over ground that was obstructed from

view might have inflicted considerable damage upon the retreating opponent.

A general survey of the course pursued by the Fourth brigade shows at once that final success was rendered possible only by the fact that the division commander, upon reaching it, found two battalions of the Fourth brigade (First of the Fourth and Third of the Third regiment) comparatively untouched. But he could only count on one of these; and as the reserve battalion (Third) had participated in the action independently, he was no longer able to exercise any influence other than that of a purely personal character. When we consider, however, how the situation could have developed, especially if the enemy had begun a hot pursuit, we have grounds for serious doubt whether Lieutenant-General A——'s plan for attack was a judicious one.

According to our view, the course pursued by the division commander would have been justifiable only if there had been a body of troops in close order, at least two or three battalions, disposable behind the center of his extended line of battle. The general seems to have counted too much on the assistance promised him by the First division. Its nearest brigade, however, at Hohenbruck, was too far away to render any assistance whatever upon the left wing of the Second division during the decisive attack.

Under these circumstances we believe it would have been better had Lieutenant-General A—— arranged his attack along different lines, particularly if he had dispensed with the distant flank movement during the engagement. In the first place, the enemy offered a frontal resistance only near the highway and south of Saddle 451. The deployed Third brigade sufficed to hold him fast in front and to engage him, while the Fourth brigade could have remained in reserve in close order and assembled behind the left wing of the former. The first problem was to drive off the foremost fighting line of the opponent. This included the seizure of the little thickets near the northern foot-path, from which point the outflanking of that part of the line of battle would then have been possible, and at the same time the swarms of skirmishers south of the saddle might probably have been dislodged. If the extreme left wing of the Third brigade should prove un-

able of itself to capture the thickets, then the Fourth brigade could have assisted by deploying several of its battalions.

In case the enemy should fall back, but still hold his ground in the little woods northeast of Neu-Rognitz, the Third brigade should attack in flank, with the Fourth brigade still covering its left at that point, and only putting as many battalions into action as were needed to support the attack. On no account should the division have staked its entire force upon a single throw unless other troops furnished a dependable reserve.

As regards losses, we must call attention to the peculiar fact that they are generally overestimated by troops and underestimated by commanders. After a fierce engagement, the reassembling battalions at first glance look like diminutive clusters, or the report is received from the one or two officers present that all that remains of a battalion is, say, 250 men, though frequently, but not always, we may console ourselves with the thought that the following morning the battalion will be somewhat nearer its proper strength. We must be careful in summing up losses immediately after an action; it requires a special faculty to judge them even approximately correct. To do so, one should have carefully observed the stubbornness of the fight at each point separately, and should take into consideration how much the terrain itself favors losses by fire. The dead seen on the ground are only a guide for one particular point, and it is impossible to observe the effect on other parts of the field; furthermore, if we wait until the next morning, a large portion of the killed may be buried.

Another question is, When should a mounted officer dismount? A battalion on the line or a deployed regiment can be managed only if the commander remains on his horse, so that he can hasten at any moment to the spot where he must give an order or where, for other reasons, his presence is demanded. But there is a limit to this. If the entire body of troops finds itself in an infantry fire fight, and has deployed all its subdivisions, a commander halting mounted in their midst would be soon put out of the fight. We can therefore establish only the following rule: that leaders should remain mounted until the troops under their command are deployed, when they should dismount and remain with that subdivision

which is retained in close order and available for the fight.

If the assistance of one adjutant which regulations allow a brigade, regimental, and battalion commander is not sufficient, then the leader must resort to mounted riflemen and orderlies on foot. We are not rich enough in officers to meet the certainly justifiable wish for a second adjutant. Nothing is left, therefore, but to detail permanent orderlies from the division cavalry, when mounted riflemen are not available. Though this may not be pleasant for the cavalry commander, it is something that cannot be helped.

A great deal can be said on the subject of the use of cavalry patrols—since it has been alluded to here. We really do meet with some peculiar views relative to the comprehension of their duties. A patrol was here designated to keep up communication between two divisions; it rode from one division to the other, kept track of movements made, watched now the columns of one and now the columns of the other division, and when it had done this, safely returned to the bivouac of its regiment in the afternoon. There was no need of despatching patrols for such a purpose as this; large bodies of the enemy attempting to move forward between the divisions would have been discovered without their assistance; their employment should therefore have had another object in view. Of what use was the sending of a troop to scout the country between Rudersdorf and the Aupa by the commander of the First regiment of hussars, when he learned nothing whatever of what was going on there? On such a mission the 30 or 40 horses would be utterly useless, since for hours the commander and also Lieutenant-General A——— were without knowledge of the important movements of the Guard in that region, and the division commander was finally obliged to send a staff officer, and later his senior aid, to find the Guard division and bring information of its whereabouts.

This troop of hussars should have sent in frequent messages, reading about in the following manner:

1. Arrived at x o'clock on the line $n-n$. Only weak uhlan patrols in front of us, which are turning off in the direction of y .

2. Advanced to x . A squadron of hussars from the First infantry division of the Guard corps arrived here from

n, and states that its division is approaching from *p* to *q*, and is now about $2\frac{1}{2}$ miles from *q*.

3. Tried to get around the left flank of the opponent while he was engaged. Found the edge of the woods occupied by infantry. Troops were visible near Staudenz, probably 3 battalions. The advance guard of the Guard division, consisting of 4 battalions of infantry, 3 squadrons of cavalry, and 3 batteries, has already arrived near *x*.

4. The advance guard batteries of the Guard have just opened fire from *y* against a hostile battery near Staudenz. The infantry of the Guard is deploying for action at *y*, and intends to move toward *v*.

5. The advance guard infantry of the Guard division has gone into action against the woods northeast of Staudenz, which the enemy has occupied from the direction of the village. Three more batteries have also gone into action. The main body is approaching, its point having already arrived at *x*. As the country between Rudersdorf and the Aupa is sufficiently secured and watched by the presence of the Guard, I shall leave a non-commissioned officer with some messengers here to observe the progress of the engagement, and shall lead the troop back to the regiment.

As a matter of course, place, time, signature, etc., should appear on the messages.

In this or similar manner should cavalry detachments conceive their task, and not ride about and let nothing be heard from them. "But what should I have reported? There was nothing to report," is frequently heard. Even the report that nothing is going on is of great benefit to the superior leader, aside from the fact that he is thereby assured that the patrol is where it ought to be, and is not forgetting the task it was sent out to accomplish.

Equally at fault was the conduct of the hussars of the Guard division, who were seen on the battle-field of the Fourth infantry brigade, but failed to report to any of the higher commanders. If we desire to bring a correct report from a battle-field, we cannot do so without first having interviewed its commander, to whom it is also of vast importance to get information from the strange body of troops that has sent out the patrol.

This faulty conduct of the hussars of both divisions may explain why Lieutenant-General A—— became impatient, and, after once despatching a staff officer, also sent his senior aid on the same errand. This seems quite superfluous, as the staff officer would certainly have soon returned, and it is not well, either, to take the senior aid from duty on a battlefield for such a purpose.

Let us caution here, that any officer (like the staff officer in this case) who has just been present in an unfortunate engagement, must be very careful of his personal deportment when sent to a strange staff. Let him deliver his message there, and give such explanations as may be called for, but let him beware of adding in an excited manner and by his own descriptions, how badly things have gone, or how dangerous the situation has become. He will either communicate this unrest to others, or will cut a very comical figure if a spirit of calm deliberation prevails in the staff to which he is sent, as is usually the case.

The first regiment of field artillery had done all it could in opening up the pursuing fire. It had left its first position of its own accord, after the assailing infantry had penetrated the woods north of Neu-Rognitz. At first it found no position for its pursuing fire, but held in readiness on Hill 527 to meet a setback at any moment, while the Fourth and Fifth batteries had a chance to take part in the capture of the thickets near the wagon-road. The zeal displayed by the horse battery in reopening fire against superior artillery, in the justifiable expectation that the Sixteenth regiment of field artillery would hasten up, deserves especial commendation. It would have been the duty of the corps commander to urge it to do so, if necessary.

THE SEVERAL PARTS OF THE DIVISION FROM 2:20 TO 4 P. M.

Details in the Fourth infantry brigade have already been considered, in connection with the interference of the division commander. This much, however, remains to be added:

The advance of the Third regiment against the patch of woods south of the wagon-road was intended to mark the commencement of a new period in the engagement. On the left wing the Second company of the First battalion cleared

the bushes along the creek of hostile skirmishers, while the three other companies of this battalion finally crossed the meadow-bottom south of the wagon-road and gained ground against a diminishing fire. The Sixth and Seventh companies of the Second battalion deployed as skirmishers north of the wagon-road, while the Fifth and Eighth companies followed in a second line across the strip of meadow. A little later the Third battalion was led in support of the attack, over the southern foot-path, against the northern edge of the woods, which was occupied by hostile skirmishers, who had fallen back from their main position. While 9 or 10 platoons kept the thickets so occupied by the enemy under a flanking fire at a distance of 650 yards, the Fourth and Fifth batteries of the division artillery regiment, which had arrived on the center of Ridge 527, swept the interior of the thickets with shrapnel at a distance of 1,400 to 1,500 yards. Very soon unusual commotion was perceived among the defenders in the northeastern corner of the woods, which gave the First, Third, and Fourth companies opportunity for a sudden charge, which they successfully accomplished, landing within the timber.

The Second battalion joined this advance, also reaching the woods; its Fifth company, however, being held back as reserve by the battalion commander.

In the meantime the Second company had gone farthest to the left, against the triangular pine plantation near the source of the creek, which the opponent had evacuated when it reached there. Gradually the hostile infantry was forced back over the dry run and the meadows lying to the west of it. In accordance with the instructions given Major Z—— by the division commander, not to attack the strong position here, but first to await the action of the Guard, the pursuing skirmishers and bodies behind them in close order were halted in the captured patches of woods upon the order of the commander of the First battalion of the Third regiment, who was then in charge of the regiment, and only patrols, some under lieutenants, were sent out to follow the enemy.

By their advance south of Alt-Rognitz toward Rudersdorf the 2½ squadrons of the First regiment of hussars had caused the hostile uhlans to fall back in the direction of Staudenz.

The commander did not care to follow farther, as the entry of the Guard in the engagement made it unnecessary to work around the hostile right.

The position of the various subdivisions of the Fourth infantry brigade at about 4 p. m. was consequently as follows:

The First battalion of the Fourth regiment was in the patch of meadows in and east of the southern end of Neu-Rognitz, engaged in a skirmish fight; behind them and north of the thickets at the wagon-road were the Second and Third battalions of the same regiment, brought up as division reserve.

On the left wing were the Second and First battalions of the Third regiment, in the patch of woods south of the wagon-road, with a thin skirmish line ahead and the Third battalion in rear in close order.

The 2½ squadrons of the hussar regiment were east of the creek near Hill 401.

Turning now to the Third infantry brigade, we find that at 2:20 p. m. the victorious fight of its parts engaged in front had given them possession of the northern end of Neu-Rognitz, as well as the woods west of the village on the road from Sorge to Neu-Rognitz; but, in spite of the comparatively short combat and the previous restoration of order, all of the parts of the brigade had again become mixed in the covered terrane. Companies of the First and Third battalions of the First regiment, and very soon also parts of the Third battalion of the Second regiment, which had turned out of the village into the forest, were fighting in the woods to the west. In the northern part of Neu-Rognitz the remainder of the latter battalion, and also the First battalion of the Second regiment, were engaged. The other battalions of these regiments (Second of the First and Second of the Second) had remained respectively near the quarry and in the little woods northwest of the village.

The failure of the Fourth brigade's attack on the left wing could not help but influence the left wing of the Third brigade. In the expectation of a further attack by the enemy against the repulsed part of the division, the deployment of the reserves in continuing the struggle for the village could not be risked. Only when it was evident that the enemy did not fol-

low, but was detained and would be attacked anew, did Major-General B—— turn his attention again to his own object in the fight. In the meantime he had carefully examined the terrain and situation in his front, and he directed Colonel D—— to push ahead with his regiment (the First) into the woods west of the main highway, and to flank from there, as far as possible, the middle and southern parts of Neu-Rognitz. Colonel E—— (Second regiment) was on the other hand instructed to advance into the village.

West of the main highway the action soon started off at a lively pace, Colonel D—— putting in the entire First and Third battalions of his regiment. By this renewal of the fight the troops succeeded in gradually forcing the opponent out of the forest south of the Sorge-Neu-Rognitz road, from which point the central part of the village could also be subjected to a heavy fire.

An advance from the forest against the southern part of the village was prohibited by the hostile artillery, which again went into action from a point on the southern slope of Hill 635, southwest of Neu-Rognitz, 6 batteries strong, while the little thickets near this hill were occupied in force by fresh infantry. The overthrown hostile infantry withdrew, covered by a very fierce fire from that position, while the infantry of the attackers suffered considerable loss by the shrapnel thrown into the forest. And when a dash on the part of the Ninth and Twelfth companies against the southern part of the village miscarried, Colonel D—— was finally obliged to forbid any further charging out of the woods; he held the edge of the woods with troops at the front, and brought all the rest of his force into the open ground at the quarry.

The bodies that had penetrated into Neu-Rognitz had failed to make any headway against a strongly barricaded portion of the road from Sorge, and it became necessary to enter the village from the east, which, as we have seen, was accomplished by the First battalion of the Fourth regiment. The assistance of the latter was all the more welcome to Major-General B—— when, at 2:45 p. m., the junior aid of the division came up with an order to energetically follow up the advantages gained. As the engineer company, which was no longer needed in Hohenbruck, arrived at the same time, it was

placed under the orders of Colonel E—— (Second regiment) to support the attack. The latter directed the Second battalion, located in the little woods northeast of Neu-Rognitz, to assail the northeastern boundary of the village from there, and soon after 3 o'clock he again led the Third battalion and parts of the First battalion upon and alongside the village street, against the barricade. The attack succeeded perfectly, and all the more easily because it was supported by a brisk fire from the right wing out of the forest west of the village.

The engineers cleared away the barricade while still under fire, and some of them took part in storming the adjoining farm-houses; the most important of the farm-houses at the point where the road entered was prepared for defense and occupied by one platoon of engineers. Next the Ninth and Twelfth companies were halted by the regimental commander, and assembled, and, after consulting with Major-General B——, the regimental commander posted them as reserve in the northern part of the village, while the rest of the troops that had been engaged there were instructed not to advance beyond the southern part of the village. By this time the companies of the First and Second battalions, together with the company of engineers, had succeeded in driving the enemy from the southern part of Neu-Rognitz and capturing many prisoners; several groups of the opponents had tried to defend themselves in the houses up to the last moment. An advance beyond the southern boundary of the village was prevented by the strong artillery fire. In spite of this, the engineers tried to prepare the village enclosure for defense; they also made efforts to put out the fires that had started in some of the buildings. The houses on the west side were occupied by the First company of the Second infantry, while the Second company held those east of the highway, the Third and Fourth companies being retained at the junction of the highway with the wagon-road, where one platoon of the Fourth was ordered to stack arms and carry to safety a number of the enemy's wounded that were in the burning houses, and the other platoon to defend the fortified farm premises. The Second battalion was assembled outside of the village near the wagon-road; west of the village the Tenth and Eleventh companies were mingled with the men of the First infantry regiment.

Accordingly three bodies of the Third brigade still remained disposable—viz., the Second battalion of the First regiment, which was near the quarry; two companies each of the Third and First battalions of the Second regiment, which were posted in Neu-Rognitz in close order; and the Second battalion of the Second regiment, which had assembled near the wagon-road after successfully supporting the attack upon the village.

All other parts of the Second regiment were in the village mingled with the First battalion of the Fourth regiment, or west of the village with parts of the First and Third battalions of the First regiment, or dissolved into separate fractions. The enemy's retreat was decisive, but further pursuit was forbidden, as it was impossible at that time for the artillery to render support. Major-General B—— accordingly turned his attention again to the prompt assembling of the troops. Shortly before 4 o'clock he saw the division commander approaching, and went to join him.

The Fourth squadron, which found no opportunity for action during the last period of the combat, had meanwhile endeavored to find its regiment. It met it on the left wing of the Fourth brigade east of the wagon-road and near Hill 401, and then reported to Major-General B—— that it had passed under the orders of regimental headquarters. Thus the regiment again had about 250 horses assembled.

The First cavalry brigade had remained north of the little woods at the quarry.

The First field artillery regiment, under the command of Lieutenant-Colonel J——, was directed by the division commander to open fire upon the hostile artillery on Hill 635. This task the colonel assigned to the First battalion, which had hastened up to Hill 527 (southeast of Hohenbruck), and the battalion fulfilled its commission in a very creditable manner. In the meantime the Second battalion had opened fire upon the country north of Burkersdorf, while the Sixteenth field artillery regiment finally went into action between Sorge and the quarry. The cross-fire of these 78 guns completely demoralized the hostile infantry. Soon afterwards the enemy's batteries withdrew from Hill 635, and the only field of fire available for the artillery of the Second division was still

farther to the front; accordingly the guns of the First battalion of the First regiment limbered up, and then those of the Sixteenth regiment, to seek a suitable field for their work, but none could be found. At the same moment, however, Lieutenant-Colonel J—— sent instructions to the Second battalion to advance to the wagon-road.

COMMENTS ON THE ENGAGEMENT OF THE SEVERAL PARTS OF
THE DIVISION FROM 2:20 TO 4 P. M.

During this period the character of the engagement changed considerably. The infantry had exhausted the greater part of its offensive energy, and, after order had been somewhat restored subsequent to the capture of the hostile position, contented itself with gathering in the immediate fruits of its victory by pursuing the enemy as far as the southern boundary of the village and the patches of woods. There the pursuit must, however, be checked at all events, if it was desired not to engage in another combat during the afternoon, which would again have to be undertaken without waiting for the arrival of the divisions following behind the wings.

The various parts of the Second infantry division had become too cautious, by reason of the very damaging fire of the enemy and their own experience, to risk entering the open country south of Neu-Rognitz, in the face of a strong supporting position on the part of the opponent, without orders or a mutual understanding. Only troops who have witnessed nothing but success and have not as yet been called into action will allow themselves to be misled into making an attack without due deliberation. On the contrary, troops who have witnessed a fierce fight will enter an engagement with a great deal of anxiety.

The brief description we have just given of the last periods of the engagement has casually shown the dissolving tendency of a fight for a position; it has, however, particularly shown the extraordinary industry necessary on the part of leaders in re-establishing order among their troops in spite of this tendency toward dissolution. Without order judicious control is impossible. It is indeed strange that after a precarious military situation everything else will be thought of

except the re-establishment of severed connections between troops and the collecting of masses for further efficient employment. To keep this purpose in view, not alone after the engagement, but at all times during its course, is one of the chief problems in the leading of troops. In the case in hand its labor was materially lightened, for although the defense had been obstinate in some places during the last hour and a half, in general it was absolutely lacking in energy, and the reserves had made no attempt to support it by a single counter-blow, or to restore the combat, as had been done in the early stages of the fight. The defense had either reached the limit of endurance, or, as is more probable, the situation outside of the battle-field demanded an immediate withdrawal from the position that had been occupied.

The artillery had done all it could do by hastening up to join in the pursuit, but on account of the unfavorable terrain it could be of little assistance. The First cavalry brigade seems to have expended its energy rather early, for it failed to continue its scouting on the right wing. In accordance with Regulations it should have quickly formed some of the available men into double-rank bodies, regardless of their former connection, and pressed the hostile left; the proper formation of the various organizations could have been attended to later on.

PROBLEMS.

Page 151: The Second infantry division could count on no further support.

Should it again attack the enemy at Neu-Rognitz after having taken possession of the region between Trautenau, Hohenbruck, and Alt-Rognitz, or should it confine its efforts to defense?

If the former, what dispositions must be made?

If the latter, what dispositions must the commander make as soon as he resolves to assume the defensive?

Page 163: What dispositions for attack must be made if the corps artillery had been present and passed under the orders of Lieutenant-General A-----?

How must the attack be led if the division had marched up through Trautenau and stood astride the Trautenau-Neu-Rognitz highway?

Was the intended turning of the opponent's flank by an advance of the Fourth brigade via the church of St. Paul and St. John judicious or not?

Should such a turning movement be ordered if the country between Alt-Rognitz and Neu-Rognitz was covered with connected woods?

Page 168: Were Major-General C——'s orders judicious? Could he have issued different orders?

Page 190: The initial movements were not executed in accordance with the desires of the division commander; the Third brigade went into action too soon and the Fourth brigade too late. Could the general have avoided this by his personal conduct or by issuing his orders differently?

Page 191: Suppose the Third brigade was alone in position. The enemy held the tongue of woods along the highway and the thickets northeast of Neu-Rognitz. How should the attack be started?

Page 198: In what particulars were the detailed dispositions for attack made by the Fourth brigade faulty?

Could they have been made in a different manner?

Page 205: How could the various parts of the First infantry division co-operate most effectively?

Issue orders for such co-operation.

PART IV.

THE END OF THE BATTLE.

(4 TO 5 P. M.)

The situation at 4 p. m. was as follows:

The position the enemy had so obstinately contested was in the hands of the division. The Third brigade held Neu-Rognitz and the woods west of the village. A continuation of the advance against Hill 635, northwest of Burkersdorf, which was crowned with a strong force of artillery, was hardly practicable, by reason of the fact that the batteries of the division would have to fight from lower ground. The portions of the brigade not in the first line were assembled south of the quarry of Sorge, also in Neu-Rognitz. The foremost line of the Fourth brigade (Third regiment) followed the enemy through the woods southeast of the village, while the Fourth regiment was engaged in disentangling itself from the Second, the Second and Third battalions of the Fourth being in reserve along the northern border of these woods and the First battalion being in the village. The First regiment of hussars was halted near Hill 401, midway between Neu-Rognitz and Rudersdorf. The First regiment of field artillery was in position, under fire, on the ridge running in a southeasterly direction from Peak 527, north of Neu-Rognitz, while the horse battery, also under fire, was near the Sorge quarry. Alongside the latter the Sixteenth regiment of field artillery was about to go into action. Towards the southeast the artillery of the Guard could be heard. It was known that other portions of the First army corps had taken up positions south and north of Hohenbruck.

In view of these conditions Lieutenant-General A—— placed special importance on a rapid assembling and orderly formation of his troops. It seemed hardly possible to gain any further benefit from the advantages already obtained, on

account of the complete exhaustion of the men. The troops had been on the move since 4 o'clock in the morning, and in action since 9 o'clock. The position the enemy now held could not be successfully assailed without comprehensive preparation, so for the present the division commander must be content with holding the ground already gained.

Moreover, the retreat of the enemy's right wing was decisive, the junior aid having returned at 4:30 from the southeastern corner of Neu-Rognitz, whither he had been sent for observation, and reported that the batteries on the enemy's left were withdrawing from the hill northwest of Burkersdorf. Immediately, therefore, Lieutenant-General A—— sent orders to the division artillery regiment to proceed to that hill and fire upon the retreating forces. The hussar regiment was brought to the southern end of Neu-Rognitz by a non-commissioned officer of mounted riflemen to escort the artillery.

The division commander accompanied this advance, as the formation of the ground and the state of the engagement had theretofore prevented his obtaining a perfect view of the opponent. It was very probable that a survey for a great distance might be obtained from this very prominent peak (635). The hussars took the lead, passing at a trot in column of troops over the narrow open terrane between the end of the village and the thickets to the south, then crossing the highway, and riding up the mountain slope under cover of the First squadron about 450 yards in advance. The First regiment of field artillery had been led through Neu-Rognitz, and followed the hussars. The horse battery was in rear of the artillery regiment. Parts of the Third infantry brigade had already occupied the tongue of woods crossing the highway near its forks, while to the west the leading bodies of the brigade had abandoned the border of the woods and were marching up the height.

At 4:45 the division commander reached the summit of the peak, and soon afterwards the 7 batteries opened fire from the same point on the retreating enemy. Colonel D—— (First regiment), who arrived at about that time, received orders to assemble his regiment there, the skirmishers of which were just coming up.

The view to the south was cut off at a distance of about $2\frac{1}{2}$ miles by a ridge, at the base of which arose the numerous farm-houses and barns of the combined and compactly-built villages of Deutsch-Praussnitz and Kaile, with their tiled roofs plainly visible amidst the groups of trees in the gardens. Toward the west and as far as these villages the country seemed to be bounded by a series of peaks and declivities of tolerably uniform height, over which the Königinhof road passed. This road could be distinctly traced in places as it crossed the heights. The hills sloped gently toward the east into an almost perfect plain, in which lay the village of Staudenz, while still further to the left the nearest farm-houses of Ober-Raatsch could be seen, beyond which the peaks became more numerous and the view more obstructed, the horizon finally being bounded in that direction by still higher elevations.

The ground from Hill 635 to the old quarry northwest of Staudenz which was occupied by the division's most advanced line formed an abrupt edge to the depression in front, and on the whole, the entire region up to Deutsch-Praussnitz and Kaile might be compared to an elongated kettle.

At the foot of the hill was the compact village of Burkersdorf, to the south of which, and also to the east in the direction of Staudenz, were well-defined patches of timber.

As already stated, the terrane was so open that it could be surveyed at a glance, and any movements of the enemy in it could be observed at least in their outline. South of Burkersdorf hostile infantry was still visible, having evidently just evacuated that place. The thickets farthest to the east, as well as Staudenz, were still occupied. A hostile battery in the west end of Staudenz was in action against Hill 635. An infantry engagement could also be seen northeast of that village.

In addition, hostile columns were visible upon and alongside the highway to Kaile, as well as upon the country road from Burkersdorf to Deutsch-Praussnitz, the rearmost bodies being about midway between Burkersdorf, Kaile, and Deutsch-Praussnitz. A large force of cavalry, perhaps 3 regiments, was visible south of the thickets between Burkersdorf and Staudenz, headed toward the latter place. The highway to Königinhof, on the contrary, seemed to be used only by a few

of the retreating subdivisions. The hostile artillery that had been in action on Hill 635 could be seen withdrawing by this highway at a trot, its rear battalion having just approached the two hills capped with windmills east of Ober-Soor.

The division commander readily perceived that under these circumstances no damage could be inflicted upon the enemy, who had been able to collect his forces and retire in good order by posting fresh artillery and infantry on Hill 635. Moreover, the occupation of Staudenz and the patches of wood afforded good support for a continuation of the retreat. The evacuation of Burkersdorf, just completed, and the evidently good start which the masses in sight had obtained, justified the inference that the retreat was progressing in good order.

An opportunity to employ the cavalry regiment of the division could hardly be expected. Lieutenant-General A——— therefore contented himself with directing Colonel D———, First infantry regiment, to send a battalion to Burkersdorf, and instructing the commander of the First regiment of field artillery to pursue the enemy as far as practicable with fire. The hussar regiment was ordered to keep at the heels of the opponent, and at all events to ascertain his whereabouts.

These orders had been given by 5 p. m., and the division commander then turned his attention to further necessary dispositions.

COMMENTS ON THE DISPOSITIONS MADE IN BRINGING THE FIGHT TO AN END.

(4 TO 5 P. M.)

The division brought its offensive advance to an end after it had taken Neu-Rognitz and reached the little meadow valley east of the village. An attack on the hill northwest of Burkersdorf opposite the right wing and occupied by the enemy in force offered no prospect of success, and the division commander did not care to enter into a difficult engagement in the woods on the left wing when that part of the field would soon be evacuated by the approach of the Guard. It is possible that the halt was also prompted by the fatigue of the troops, which was in no sense slight, as well as the fact that

the Fourth brigade, which had already suffered a great deal, would have to carry on the engagement in the woods.

Yet all these reasons are useless unless troops are exhausted to such an extent that a continuation of the fight becomes an absolute impossibility. It is a leader's duty to utilize every opportunity offered, to its fullest extent, and his energy is best displayed when he overcomes all the obstacles that present themselves in such cases.

If the help of the Guard had not been expected, then only complete exhaustion and dissolution should have prevented the continuation of the attack. Under no circumstances should the opponent be left in possession of the woods over night; the engagement at the strip of meadow could not be continued indefinitely, nor was it practicable to hold Neu-Rognitz for hours under hostile artillery fire. Only two courses were open: either to drive the enemy out of his position, or relinquish part of the ground already gained and seek a more favorable position further to the rear.

As it happened, however, the Guard had already become engaged, and every minute their influence should become more annoying to the enemy; a fact which should have induced the Second infantry division to continue the fight with the utmost energy, for by so doing the opponent would not only have been prevented from turning part of his forces against the Guard, but he would have been beaten more thoroughly and lastingly the more closely he was held in front and the more difficult it was made for him to break off the action. The flanking movement of the Guard would then have been more effective and the enemy's defeat more severe.

The division's suspension of its offensive advance before 4 p. m. cannot, therefore, be accepted as correct. It is true, the general aspect of affairs made it appear probable that the enemy would soon abandon the ground which the division should occupy to secure the advantages already gained, but as Lieutenant-General A——— had not sufficient knowledge of the strength and situation of the enemy, he could hardly feel assured on this point. Far more important, however, than simply gaining a piece of ground was the opportunity here offered of inflicting more serious loss upon the opponent, and

this the division commander should not permit to slip out of his grasp. In war one cannot accomplish enough; nevertheless not every man possesses the faculty of drawing the utmost advantage from a favorable situation. Tension of the mind and bodily fatigue will in the end assert themselves even in the person of the leader. Great losses, the feeling that great things have already been accomplished, fear of a possible setback if the troops are subjected to too great a strain, all combine to put a limit to his energy, and all that can enable him to surmount this difficulty is a realization of the necessity for reviving the failing powers of his troops and giving a fresh impetus to the weaker elements, coupled with an iron will.

When, however, the heights northwest of Burkersdorf and the old quarry were finally abandoned by the opponents, the conditions relative to a continuation of the engagement assumed an entirely different aspect, for it was then evident that the enemy had marched off in good order, after having also occupied the village of Staudenz and the woods, which were very favorably situated to cover his retreat. These points furnished him excellent positions for supports and rear guards, and to have attacked them would have caused the division greater sacrifices than could have resulted from the defender holding them in his own possession for a time. Moreover, it was plainly visible that the flanking movement of the Guard had accomplished all that could be expected of it, and a more far-reaching influence on its part was improbable after the enemy had once shaken it off by his withdrawal.

When events had reached this point, attention was to be turned toward the division's own condition, and this led to a breaking off of the engagement.

One further remark must be made, however, and this has reference to the leading of the army corps. The unjustifiable cessation in the division's combat, which, as above stated, occurred shortly before 4 p. m., was in no small degree the fault of the corps commander. Even before 2 p. m. the leading brigade of the First infantry division had deployed north of Hohenbruck and about that hour received the order to proceed to the attack also, via Hohenbruck and west of the highway. (See Part III., page 231.) Under the conditions that

then prevailed, this order was eminently correct. Sufficient forces were at hand to extend the fighting line without the necessity of depriving the parts of the corps previously engaged of their necessary reserves. An advance of this brigade via Sorge must in any event draw off from the Second division some of the enemy's forces which would otherwise be employed against it. If, however, the enemy had not sufficient troops in readiness, then the advance of the First infantry brigade would flank the position the opponent had occupied near Neu-Rognitz and put him in a most precarious situation, unless he should evade the movement by a hasty retreat. Furthermore, a continuation of this flank maneuver would in all probability have prevented the enemy from making a new stand on the hill before Burkersdorf. In any event, a timely interposition by the First brigade would have lightened the labors of the Second division, reduced its losses, and brought the decision an hour or more earlier.

The brigade actually moved off, and had advanced a short distance south of Hohenbruck, when it was retained by the corps commander on account of the forward progress of the action along the highway, "in order not to involve too many troops in the fight." (See Part III., page 255.) Lieutenant-General A——— was advised of this shortly after 3 o'clock; he immediately perceived the mistake, and made recommendations to the corps commander that an advance of fresh forces west of the highway would presumably lighten the action very much. His recommendations were of no avail.

Regarding such a course we can only say, that consideration for troops should never be carried so far as not to use them at all. And whoever counts on every eventuality that an uncertain future may bring forth, and tries to save his troops, in the end is bound to miss many favorable opportunities. In the case before us it was not a question of a slight skirmish by parts of the leading division, but the entire division was engaged in a serious and decisive action, and it should therefore have been supported as much as possible. The corps commander was in a position to do this most effectively, and his failure to do so was an unpardonable error. It is in just such ways that troops are annihilated and losses multiplied. Had Lieutenant-General A——— been able to know

in advance that his commanding general would leave him entirely dependent upon his own forces, in all probability he would not have employed his entire Fourth brigade at the start in the flank attack from Alt-Rognitz, but would certainly have held back one of its regiments at his disposition as reserve.

The inactivity of the First brigade exercised no small influence on the results of the victory. We have seen that there was no pursuit, though by pursuit the most important fruits of victory are gathered and demoralization spread in the ranks of the enemy far beyond the battle-field. On the other hand theory certainly demands of pursuit more than troops can often accomplish. How else can we explain the fact that since the memorable 18th of June, 1815, our war history, so replete with battles, cannot show a second Waterloo, although it has since become proverbial in our Army that when a victory has been gained, the last breath of man and horse must be devoted to gathering in the fruits, a principle which has been instilled into us from our earliest training and the validity of which neither the youngest lieutenant nor the oldest general is ready to doubt?

In explanation, let us first call to mind the condition of a large mass of troops after a hotly contested action. When the force has once been extended and gotten more or less out of the leader's hand, it is of little value, even though some small separated bodies may still be capable of further activity. What is needed are large closed masses under a connected leadership; but these, as a rule, are no longer to be found in their proper places. And if in the meantime the enemy has succeeded in restoring order in his own lines, and thus covering the deployed masses by bodies of troops in close order, then the reckless pursuit of the victor's isolated forces will only lead to their suffering losses heavier than those of the vanquished. But such bodies generally perceive the isolation of their position and the massing of the enemy's forces, and stop at the right moment.

Lest we be misunderstood, we will here repeat that we are fully convinced that "under certain circumstances" great things may be accomplished by a pursuit, and that we hold in high esteem the injunction to employ the last bit of strength in taking advantage of a victory. But, on the other hand, a pur-

suit is not always so easily undertaken as the critic imagines when he says, "It is reprehensible that the enemy was not pursued." In war conditions do not always assume such an easy and simple course.

Let us pause to consider the example before us.

Anybody will at once understand that after marching and fighting for 12 hours, in oppressive heat, the troops' fighting powers had so closely approached their limit that they were no longer in condition to overcome the resistance of even small bodies of the enemy, with the same dash as would have been the case 4 or 6 hours earlier. Just as little were they fitted for movements needing considerable time, such as a flanking operation; and it is certain that, in view of the severe lessons they had already learned that day, they were in no condition to dash upon the hostile front.

Furthermore, an advance upon the strong artillery position on the Burkersdorf Hill would be extremely difficult; indeed, a frontal attack would have hardly been practicable when we consider the condition of the intermingled troops at 4 p. m. in the edge of the woods opposite Burkersdorf and to the west of Neu-Rognitz, especially since the terrain made support by the division's own batteries very difficult. A turning movement would have had to extend for quite a distance, which would only increase the fatigue of the troops, nor were the bodies that must initiate this from the rear in good order, since the foremost line, in the woods, could, considering the confusion, only be put into motion for a general frontal dash, and not for a difficult turning maneuver. A pursuit from that point was therefore not feasible; the question was rather one of a fresh attack, for which the troops at that moment were in no wise prepared.

Similar conditions prevailed on the left. Though the enemy could probably be followed up to the foot of the mountains extending from the highway to the old quarry, it was impossible to advance beyond that position, which was furthermore one not easily to be taken in front.

Let us remember that the assailant would have to go through a forest about three-quarters of a mile wide, and under hostile fire, and that with the view completely obstructed all cohesion would be lost beyond recovery, as well as all direc-

tion for the individual bodies. The opponent, on the other hand, was in close order, perfectly free in his movements, and able to see the approaching assailant while he himself was completely obscured.

By pursuit we understand, in general, the gathering of the fruits of a victory after a decision has been attained. As a rule, we picture this as an uninterrupted pressing after the opponent until the limit of our strength is reached.

In the case of the Second infantry division the decision came at a moment when the enemy began his retreat; he could therefore be followed as far as practicable. But the pursuit first struck a barrier after Neu-Rognitz and the woods west and southeast of it had been taken, and this barrier was drawn up by the opponent, who, with bodies in close order in a strong position, turned and faced the victor.

After a time, the enemy left his position northwest of Burkersdorf; but even then the assailant was in no condition to reap full benefit of the situation.

Yet it is certain that if the corps commander had not put a stop to the projected movement of the First brigade beyond Sorge, this brigade itself could have undertaken the pursuit, which would probably have been done. On the other hand, it was out of the question to detail the First brigade *for pursuit*, howsoever commendable it would have been to employ it *in reaching a decision*. The first thing to be thought of is to gain a victory, and troops needed for this cannot be put in motion with a view to subsequent conditions which cannot be foreseen; it cannot be perceived beforehand how matters will stand when the decision falls.

It might further be asked why the cavalry, and particularly the First cavalry brigade, was not employed. It is the special duty of this arm to keep at the enemy's heels; it shall (so, at least, says the theory of combat) gather the trophies, and spread panic far and wide.

It will be interesting here to examine more closely how far the influence of cavalry may extend.

In the first place, the larger bodies of cavalry should remain as near as possible to the fighting line. When the battle was raging around Neu-Rognitz and in the woods west of the village and along the wagon-road, the nearest infantry

reserve, the First infantry brigade, was south of Hohenbruck, and in front of this the First cavalry brigade had finally assembled in such manner that its left was not far from the northern point of the tongue of woods at the highway between Neu-Rognitz and Hohenbruck. Even after the fighting had come to a standstill in front of the heights northwest of Burkersdorf, the cavalry was standing still in the same position. The nearest open ground to which it could have gone would have been that east of Neu-Rognitz; but several battalions of the Fourth infantry brigade were already there and would have left little room for anything else.

It was 4:32 p. m. when the report of the withdrawal of the enemy reached Lieutenant-General A———. Assuming the most favorable conditions and that the cavalry brigade could be summoned by the shortest route, a distance of over a mile would still have to be covered in riding from the general's station to the cavalry. Considering the fact that the aid's horse was already tired, and counting the time needed to give the order, the aid could not have delivered the necessary instructions to the commander of the cavalry brigade before 4:38. The brigade would then start off at a trot, and it would be immaterial whether it took the road via Neu-Rognitz or Sorge. Let us assume that it chose the former; it would first take the highway, then pass around the village on the east (a region difficult to traverse on account of the engagement going on), and after crossing the highway, would take up a covered position near Hill 635. Thus it would have to pass over a distance of about $2\frac{1}{4}$ miles, frequently hindered in its journey by other troops. Its point could hardly have reached its destination before 4:50. The length of its column of march can be taken at about 1,300 yards; but in all probability this would have been prolonged so that its deployment could hardly be completed before 4:56 p. m.

The last subdivisions of the enemy had a start of at least 24 minutes, the rear of which was already about $\frac{3}{4}$ of a mile south of Burkersdorf. The cavalry would require 12 minutes, or more, before it could charge, so that it could not reach the enemy in less than 36 minutes after his withdrawal, during which time the latter, even if in disorder at the start, could fully prepare himself for effective resistance.

Furthermore, when we remember that the opponent was in no need of hurrying, that he occupied the country south of Burkersdorf and the thickets to the east in order to cover his retreat, evacuating them only gradually, also that the pursuit by infantry ended even before this, it is evident that the cavalry which would follow would on the whole not be in position to achieve very great success.

But it might be argued that the example before us was selected for the especial purpose of illustrating unfavorable conditions of pursuit. This is not at all the case. The description of the conditions follows from the very dispositions that were made, and the situation was the natural sequence of the course the engagement had taken.

As a matter of fact, a similar result will be observed in the majority of battles and engagements. Pursuit will always depend upon conditions on both sides, after the decision has come. The degree of dissolution on the side of the victor is taken into account as much as on the side of the vanquished, and except the defeat degenerate into a rout, the one who has been beaten will always be able to offer resistance in various positions. Defense is so powerful that we do not attack without hesitation. It takes time to restore order among pursuers, and all this accrues to the benefit of the vanquished. After we have driven the enemy out of his position by employing our entire strength, and so brought about a decision, we will not always be in condition to undertake new and costly partial attacks with our tired and intermingled forces, against the positions which the enemy has occupied during his retreat. An instructive example of this is found in the retreat of the French from Le Mans in 1871.

In general, an exhaustive utilization of a victory will be governed by the number of fresh reserves available to break the resistance of the enemy in a new fight.

But it is entirely different when the retreat degenerates into a complete rout, when the fleeing swarms have given up all thought of further resistance. Then isolated bodies of the victor may follow, and hundreds will often throw down their arms before a few horsemen.

The pursuit after Waterloo was inaugurated under the most favorable conditions, a repetition of which will not easily

occur again. The French army numbered about 60,000 men, which was approximately the strength of two Prussian army corps, and its retreat must consequently be regarded in a different light, as far as space is concerned, than the maneuvers of our tremendous masses in the late campaigns. The extent of the field makes a difference in the estimate of the situation, in the issuing of orders, and in the participation of individual units. In addition it must be remembered that the French army had struggled *up to the last moment* for victory and had employed *its full strength*, so that when Fortune decided against it, its forces were shattered, with a few exceptions not worthy of mention. Under such conditions the Prussian attack in the rear of the right wing was bound to be of momentous consequence, and when the opponent saw battalions of Prussians behind him instead of the long-expected columns of Grouchy, he gave no thought to resistance, but broke down completely, becoming an easy prey to the victors. Gneisenau's memorable pursuit continued without interruption for more than 8 miles from the battle-field, which had never been entered by the mass of the victorious troops. *It was conducted with 1 battalion and 2 platoons of infantry and 6 squadrons of cavalry*, and it was not until the next morning that a larger number of squadrons reached the bivouac of these advanced forces. This is proof of what even small bodies may accomplish against disordered and demoralized masses.

We trust we have here reduced the idea of "the last breath of man and horse" to its true merit, in opposition to the so frequently appearing unjustifiable criticism. The principle that we must achieve the utmost possible benefit from every victory remains uncontested, but how far this is practicable can be determined only at the station of the commanding general and with a view of the entire situation. As a rule, this decision is rendered afterwards, when a full knowledge of conditions on both sides has been gained, and under the most varied assumptions as to what the commanding general must have known, etc. But there is a tremendous difference between *must have known* and *actually did know*, a difference which we are too often led to ignore.

Thus the "neglected pursuits" may be founded more upon actual conditions than would generally be admitted, and the

frequently criticised neglected pursuits in hundreds of battles might furnish proof that war throws other considerations in the scale than those generally considered in battle theories.

On the other hand, we must call attention to another condition of frequent occurrence, but which, in our opinion, might always be avoided—viz., that *after many a victorious battle touch with the enemy has been lost almost completely.*

In the campaign of 1866, during the last days of June we had an almost uninterrupted series of very serious engagements in widely separated places with 6 hostile corps, and on July 2 we were absolutely in the dark regarding the enemy's whereabouts. The first order issued by the commander-in-chief on July 3 (but which was not executed) began as follows: "As touch with the enemy has been lost, in spite of an uninterrupted series of engagements," etc., and the official report shows that on the evening of the 2d the entirely erroneous impression prevailed that the Austrian army had retreated across the Elbe and was on the point of inaugurating an advance over the river anew.

To keep touch with the enemy, when once gained, is the duty of the cavalry; but to accomplish this, it must be given the correct direction of march by superior headquarters. If this cannot be determined immediately, parties should be sent out on all the roads to be considered. Otherwise it can easily happen that a squadron following a certain road will send word back after 12 hours that it has found only scattered parties of the enemy, and it will then be too late to search anew on other roads. Anyone at all familiar with military history can readily recall examples illustrating this same point.

But in most cases it will be alleged that the cavalry is too greatly exhausted. This is frequently the case when we are only considering the strength of the horses and are of the opinion that they will not be able to do any more work for several days. Such notions are entirely erroneous. *When cavalry can be used, it must be used, regardless of whether the mounts may be ruined thereby or not.* Yet there are times when at the end of a fight the cavalry is no longer able to accomplish anything; but it can frequently be found that the reason for this is that the cavalry was ruined by being

needlessly shifted about during the course of the entire engagement.

THE THIRD INFANTRY BRIGADE FROM 4 TO 5 P. M.

We have seen that shortly before 4 o'clock Major-General B—— received orders to occupy the southern border of the woods west of Neu-Rognitz, and also the village itself, where he would re-assemble his brigade.

Accordingly he instructed Colonel E—— (Second regiment), who was on the spot, to assemble and form up again in and west of Neu-Rognitz all parts of his regiment not required in holding the village. He despatched one of his aids to Colonel D—— (of the First regiment) with similar instructions, directing him to hold the woods west of Neu-Rognitz, posting such troops as were necessary in and north of the woods.

Turning first to the right wing of the brigade, we have seen that before 4 p. m. (Part III., page 174) Colonel D—— had already made dispositions which were in full accord with the intentions of brigade headquarters. After the capture of the woods west of the village, he was in the thickets near where the foot-path enters coming down from Hill 635, and there he gave his adjutant these instructions: "Ride east along the border of the timber to the corner projecting toward Neu-Rognitz, and tell all officers that for the present I forbid the crossing of the edge of the woods. Instruct Major Y——, commanding the Third battalion, to take charge of all troops on that side of this path, occupying the border of the woods with such force as is absolutely necessary, and assembling the remainder further to the rear. Then return and wait for me here."

After giving these directions, Colonel D—— rode off toward the west along the edge of the woods. He soon met isolated skirmishers of the First battalion, and immediately instructed a junior officer found there to occupy the line up to a well-marked tree (about 400 yards distant) with these skirmishers. In the southern extremity of the woods, which projects out some distance toward Hill 635, he found large bodies still contending with the enemy's skirmishers in

a strip of timber opposite, while a little further to the rear he noticed a body in close order, also a mounted officer. He joined this officer, whom he found to be the commander of the Fourth company of the First regiment, and who reported that he had with him $2\frac{1}{2}$ platoons of his company, 1 platoon of which was deployed as skirmishers and the remainder forming the supports the colonel had noticed. To the right the colonel saw another officer with a few men of the First battalion, and also quite a number of men, from different companies of the First regiment, in the firing line. He was satisfied that this force was fully sufficient to hold the point of woods, and so he ordered the captain to take command of it, but not to go beyond it unless he received specific orders to that effect. If other men belonging to the regiment should come up, he was ordered to form them into small squads and send them back to it, as all troops not needed in action would be assembled in and north of the woods.

Thereupon the colonel returned to his former station, where he was joined by his adjutant, who reported that he had executed the orders given; adding that Major Y—— was present. The regimental commander proceeded to join the latter, from whom he learned that he had ample force from his own (Third) battalion on the spot to hold the edge of the woods, and that, pursuant to orders, he was sending back all men of other organizations. The colonel advised him of the state of affairs on the right, and then rode on into the open ground near Sorge to expedite the assembling there.

Near Sorge he found as a nucleus the Fifth and Eighth companies in close order. Squads of men from different organizations came pouring in from all sides. These were grouped first by regiments, and then fell in again by companies. Several officers and non-commissioned officers were sent out to direct to Sorge any men who might be easily led in the direction of the quarry by reason of the shape of the forest.

Gradually five bodies of varying strength formed not far from Sorge. The first consisted of men from nearly all companies of the First battalion of the First regiment, in all about 150; the second comprised the Second battalion, which was in tolerably good order; the third was made up of about 200 men of the Third battalion; the fourth numbered about 80

men of the Third battalion of the Second regiment; the fifth included about 70 men of the Fourth regiment who had become separated from their organization during the assault upon Neu-Rognitz.

Before Colonel D—— reached this spot, he was met by a staff officer from brigade headquarters, who delivered the order above mentioned. About 15 minutes later the staff officer returned and informed the colonel that a considerable number of his regiment had been collected east of the highway and directed to the vicinity of Sorge, and that the brigade commander had instructed him to lead back to their proper battalions any parts of the Second regiment found near Sorge. Colonel D—— replied that only 80 men of the Third battalion of that regiment had so far come in; adding that he would send them to Neu-Rognitz immediately.

Colonel D—— then entrusted Major N——, the commander of the Second battalion, with the distribution of the bodies approaching from the east of the highway, which consisted of parts of the Sixth, Seventh, and Eighth companies, as well as a few men each from the Tenth, Eleventh, and Twelfth companies. He directed the major to send the assembled men of the First battalion into the woods in the direction of Hill 635, as soon as order was restored, where they would come upon their battalion. Men of the Third battalion, on the other hand, were sent by the colonel to the left of the regiment, where he knew the remainder of their battalion was in action. He directed the Second battalion of the First regiment to remain for the present in reserve east of Sorge; however, he did not await the complete restoration of order in this battalion, but again went to the most advanced firing line, where the artillery had just then (4:30 p. m.) ceased fire.

Fifteen minutes later Major N—— was in position to send over about 150 men to the First battalion; he had 560 men of his Second battalion on the spot. Later 50 or 60 men of the Third battalion arrived. The Second was still short nearly 400 men, who, considering the short space of time the fight consumed, could hardly all have been killed or wounded; it was reasonable to suppose that probably 100 of these had either joined other troops or were still wandering over the battle-field.

Directly after he had sent forward the men of the First battalion, Major N—— received orders from Colonel D—— to form up all subdivisions remaining with him, and advance.

Shortly after 4:30 Colonel D—— approached the southern boundary of the forest. The troops who had hitherto occupied this line had left it and were advancing upon the opposite height, which the enemy's artillery had already abandoned. Soon afterwards he also saw the artillery of his own side, with the hussars, advancing from the direction of the highway. He met the division and brigade commanders upon Hill 635. Accordingly he sent the above-mentioned order back to Major N——. A little before 5 o'clock he received instructions from the division commander to occupy Burkersdorf with 1 battalion.

At that time (5 p. m.) the infantry of the right wing was distributed as follows: In the first line, which had been joined by the detachments sent up, was Major X—— with 700 men of the First battalion on Hill 635. The greater part of the Third battalion (500 men) was marching across the open ground toward the peak, the Eleventh company being detached. The Second battalion of the First regiment, with 560 men,¹ was coming through the forest south of Sorge.

Turning now to the Second regiment, in pursuance of the brigade commander's order to occupy Neu-Rognitz and assemble the troops in the village directly west of it, Colonel E—— called his adjutant and several mounted officers to his assistance and directed the scattered bodies of the Third battalion to the open ground west of the village, whither parts of the First battalion of the Fourth regiment had also moved. The First and Second battalions of the Second regiment, also the company of engineers, remained in the village.

The troops were assembled in the same manner as upon the right wing, and it was found that every company was accounted for. A few men were there from the First regiment. The First battalion of the Fourth regiment was still dispersed in the southern part of the village, and was gradually extricated from the ranks of the Second regiment. By direc-

¹Over 100 men were later led up by the officers and non-commissioned officers sent to the quarry.

tion of the brigade commander, the men of the First regiment were sent toward Sorge. In addition, Colonel E—— sent all men of the Fourth regiment to the eastern boundary of the village.

When report of the withdrawal of the enemy arrived, Colonel E—— hastened to the southern point of the village and prevented a further pursuit on the part of the companies of the First battalion stationed there. Soon afterwards he brought the Second battalion up to the entrance of the Alt-Rognitz wagon-road.

Order had been generally established in both regiments of the brigade, although the several battalions of the Second regiment were still short a considerable number of men.

THE FOURTH INFANTRY BRIGADE FROM 4 TO 5 P. M.

When, before 4 p. m., the withdrawal of the enemy from in front of the Fourth brigade could be observed, the division commander directed Major Z——, acting brigade commander, to advance still further, but instructed him not to extend the pursuit beyond the southern edge of the woods in front. The companies of the First and Second battalions of the Third regiment, which were deployed on the foremost line, had already crossed the gully and followed the retreating forces, though without specific instructions to do so. Major Z—— instructed the bodies in close order to follow in such a manner that the company on the left wing would advance along the western bank of the creek coming down from the old quarry, while two companies moved on the right wing outside of the forest and along its western border, so as to cut off the retreat of any hostile parties who might remain too long in the thickets. The Third battalion of the Third regiment, in reserve, was ordered to advance to the next gully.

It was not necessary to support the troops fighting in the woods, as the enemy retreated hurriedly and without offering serious resistance, some of his troops even losing their direction by so doing; and when the skirmishers of the Third regiment also lost connection, a considerable body of the enemy suddenly appeared on the northern edge of the forest in front of the Second and Third battalions of the Fourth regiment

which were there posted. On this occasion some platoons of the Second battalion which quickly deployed captured about 60 men.

The company of the Third regiment advancing on the left wing in the direction of the old quarry very soon found opportunity to take part in the action, but after a few shots were fired, the enemy fell back toward the south. On the right, however, the flank movement could not be executed, as the two companies of the Second battalion came under the fire of the hostile artillery on the hill northwest of Burkersdorf, in consequence of which they rushed into the strip of woods projecting westward and crossing the highway, and from there opened fire upon the guns and their infantry escort. In the meantime the remaining parts of the regiment advanced farther into the thickets, until some of them reached the southern edge, but in complete dissolution. Several parties, stepping out of the border, attempted to climb the quarry hill and the mountain crest running along the Staudenz road, but were turned back by the fire of the hostile reserves who occupied these positions in support of the retreating troops.

Although it was not intended to advance further, these attempts would probably have been continued had not the fight and the laborious march across the difficult ground completely exhausted the troops. But such was the situation when at 4:30 p. m. the enemy abandoned the heights of Staudenz and Burkersdorf. The Third regiment occupied the old quarry hill at 4:45, and Major Z—— directed the First and Third battalions to remain there while the Second battalion was sent toward the highway.

At 5 p. m. order had not yet been fully restored. The greater part of the First and Third battalions of the Third regiment were, however, at the quarry, whither during the latter phase of the action the Eleventh company of the First regiment and also half a troop of the Third squadron had arrived, having marched across the country in the direction of the engagement after they had been relieved from duty in the valley of the Aupa by portions of the Guard division. The Second battalion was in the act of taking up position at the fork of the two highways.

The fourth regiment, now fairly well re-assembled by the arrival of the First battalion, was stationed in reserve on the wagon-road east of Neu-Rognitz.

COMMENTS ON THE DISPOSITIONS OF THE THIRD AND FOURTH
INFANTRY BRIGADES FROM 4 TO 5 P. M.

The situation on the right wing of the Third infantry brigade, and particularly with the First regiment, was one which readily leads to hasty, isolated attacks. The troops, having cleared the woods west of Neu-Rognitz, felt that they were going ahead victoriously, and did not like to be checked in their advance as long as an enemy was in sight. This tendency, howsoever praiseworthy in itself, must be curbed, for the fight carried on in the woods had played havoc with order: organizations were intermingled, and bodies in close order wandered about in the woods without any fixed direction of march, and were generally missed at the very places where they were most urgently needed; had it been desired to continue the attack, the fighting should have been carried beyond the edge of the forest.

It is, however, difficult to exercise such restraint in front of an enemy in close order. On account of the obstructed view in timber, it is hardly practicable to lead from a position in rear, and from a position in front of the woods it is even impossible. It thus happens that a leader, carried away by his eagerness for battle and animated by previous victory, will frequently push forward out of a forest, with his platoons, companies, or other troops he may have gathered together, to attack the opponent anew, as was done during the action in the woods of Sadowa. But they are dependent upon themselves alone, are not seen by adjoining bodies and consequently not supported by them, and are not followed up by supporting troops, so that such maneuvers will rarely lead to success, but will rather help only to increase the unnecessary sacrifices. These are conditions in which the superior officers find it difficult to interfere. All the more, therefore, should platoon and company leaders appreciate the fact that after they have advanced through a wood and reached its

edge, they should not, without great caution, dash out against any enemy who may be seen on the outside.

Accordingly, as we have seen, Colonel D—— busied himself in trying to prevent a breaking forth out of the forest, by first having the edge of the woods occupied by the foremost subdivisions, and then bringing the remainder of the troops into the open ground near the Sorge quarry, there to re-establish order. Such a movement is, however, fraught with great obstacles, and to execute it properly, one cannot be content with alone complying with the instructions word for word, but must let his good judgment have full sway.

The Third brigade was favored by a cessation of hostilities just at the beginning of the period under consideration, and this was such an occasion as generally permits a complete re-assembling. But the main point is to think of doing it at the proper time, a precaution that experience shows is taken only in the rarest cases.

The cause of this is readily ascertained. No one can perceive that a fight has ended at the exact moment it comes to pass; all that the assailant can know is that for the time being he does not intend to continue the pursuit; all further action depends particularly upon the intentions and measures of the enemy. Every leader halts, and awaits what will really happen; he thinks he will be called upon to make a quick decision, and consequently does not like to leave his place of observation, which he must do if he would re-assemble his forces. Or in time he will conclude that he can leave for a moment, but has hardly gone a few paces when he gets a new view of the hostile position or discovers some new movement on the enemy's part, and again he halts to observe. Minute is added to minute; a quarter of an hour has passed, half an hour, an entire hour, and the troops are still as much disordered as before, and therefore not fit for energetic work.

But if the importance of re-assembling is called to mind at the proper time, then the right moment will be made use of; and even if the further progress of the engagement compels us to suspend the movement before it is fully carried out, we shall nevertheless have brought our forces into a better condition by a partial assemblage.

A higher leader like a division commander has the advantage in that more assistants are at his disposal, who can observe for him and issue his orders; it is not so with a battalion or regimental commander; furthermore, the former need not stop observing the progress of the engagement to put troops in order again, which at times a regimental commander must do, as happened with Colonel D——.

With proper attention, however, order can be re-established in the first line during pauses in an action, for as long as the leader is at the front the enemy cannot escape his observation. How order shall be restored depends in each case on circumstances. We have attempted to show this in the case of the right wing of the division. After the front line has been put in order again, the troops must first be collected behind it. Much depends upon the choice of location. Theoretically the small farm of Sorge did not fill all the requirements, as some of the troops, especially those who had advanced near the highway, had not the slightest idea of its existence. Therefore it was necessary to make arrangements whereby the men coming out of the forest farther to the north could be conducted to the rendezvous.

Where practicable, it is recommended that men be directed to follow one particular road. This tends to start a single stream, which can be stemmed easier at any point than if the men swarm in from every part of the field.

At all events, it is of paramount importance to collect the men at the rendezvous in bodies corresponding with the higher units. For example, if a division has been broken up in an action, separate rendezvous must be chosen by the brigades, or be assigned them. At each of these points the troops of both brigades are first separated, and again sorted into regiments and battalions as soon as the number present permits. It is always preferable that the highest headquarters designate the rendezvous in advance, so that an exchange between the points can be inaugurated. Colonel D——'s steps in this direction have been described in such minuteness because they best illustrate how this problem can be solved. The whole situation of the Third brigade in this case also illustrates how a lively engagement will mix troops. Indeed, such mixing may proceed to a still greater extent. We dis-

tinctly remember once when, at the close of a battle and when darkness was setting in, the bodies of an army corps were sent back in such a mixed condition that it became necessary to station officers upon the main road, over which all must pass, who called out continually, "X division to the right, Y division to the left"; the rendezvous in this case were accordingly to both sides of the road.

Wherever practicable, we should let troops assemble forward, as was done with the forces in the thickets northeast of Neu-Rognitz.

The illustration further shows that, on account of the interruption caused by the forward movement which took place during the restoration of order on the right wing, the assembling continued for over an hour, at the end of which time the troops were not even in proper formation. Nevertheless they were in such condition that it was possible to correctly lead them during an action. Except for the dead and wounded, all still missing would gradually come up with their battalions again, though it could hardly be counted on that they would all return before midnight; and even if the troops should not remain in the same place the subsequent forenoon, the end of the next day might not see all with their colors.

The foregoing illustrates how difficult it is to assemble. It also admonishes us at the same time to keep in mind at every moment the importance of re-establishing order when once lost. Yet even when a victory that has been dearly gained is over with, we do not always immediately call to mind this injunction, still less during short pauses in the midst of an engagement; a fact that is fully borne out by experience.

In the case of the First regiment, the occupation of the woods west of Neu-Rognitz afforded the protection necessary for re-assembling the other parts; with the Second regiment the same was accomplished by holding the village. The commander of the Second regiment, Colonel E——, was enabled to collect his troops without much delay. He, however, occasioned a great deal of trouble by intermingling the First battalion of the Fourth regiment; there was not the least necessity for keeping parts of that regiment with his

troops any longer; he was aware their regiment was near by, and he should have sent them to it at once.

It is easy to understand the reason for the pursuit begun on the left wing of the division by the companies of the Third regiment deployed toward the edge of the forest, as soon as the enemy withdrew from that point; the only question was, Should Major Z—— cause the second line of the regiment to follow also? Under such circumstances, deployed bodies in touch with the enemy must always be supported, and in no case should they be allowed to advance 1,000 yards or a mile unsupported. As a rule, small bodies will follow such a line, but in this instance it was necessary for the whole Third battalion to follow, as the woods had to be seized; the previous halt in front of the woods was only temporary and demanded by other circumstances.

A leader must be cautious in regard to details when assigning direction of march to supports. It is not enough that the company commanders order them to follow. The woods in front were over a mile wide and almost three-quarters of a mile deep. Even in maneuvers conducted in time of peace we will notice that when a deployed brigade is led through a dense forest of this size, frequently all cohesion will be lost and it will be necessary to form the brigade up again on the other side of the woods. In war we will therefore do well in such cases to conduct the several parts so they will not readily lose direction. Roads are then a great help. In this case, however, there were no roads running north and south in the woods; a difficulty which was overcome by sending the companies on the left wing along the gully coming from the old quarry, and those on the right along the western edge of the woods. The result of this movement was that hostile parties which had lost their direction suddenly appeared again on the northern edge, in view of the Fourth regiment, which was stationed there in reserve.

Such events are indeed characteristic of every fight within woods, and can always be expected, as the view is completely obstructed. We need only recall the Austrian battalion at Königgrätz that marched out of the Maslowed woods and stumbled on the Prussian line of battle instead of its own, and

fell into the hands of Humbert's squadron of the Magdeburg hussars.

Accordingly it is all the more necessary to remember that when entering woods all parts should not be sent in at the start, but at least a few companies held in front of the border.

Neither must we neglect to shorten distances. On this point Infantry Drill Regulations specify distinctly: "A narrow front, close order, and strong flank reserves must be provided. This is particularly necessary when the fight is entirely within the woods, the movements of bodies in close order being then confined to roads."

The compass is another thing that must not be overlooked for use in a forest.

DISPOSITIONS FROM THE END OF THE BATTLE (5 P. M.) UNTIL NIGHTFALL.

We left Lieutenant-General A—— on Hill 635 just after he had given Colonel D—— orders to occupy Burkersdorf with 1 battalion.

The left wing was made up of parts of the regiment that were on the spot, and started off immediately toward the northwestern part of the village.

The batteries on Hill 635 considered it necessary to reopen fire on the hostile artillery, 2 batteries of which had again gone into position on the highway near Hill 603 and Hill 609, close to the mill.

Meanwhile the division commander had instructed one of his aids to find the corps commander and report that the enemy held the country south of Burkersdorf and Staudenz with only a small force, all of his other troops having withdrawn to the line Deutsch-Praussnitz-Kaile, and that the division would bivouac south of Neu-Rognitz, on both sides of the highway, and would establish outposts, keeping the enemy all the while steadily in view.

He then directed Major-General B—— to assemble his brigade east of Hill 635, leaving out the Third battalion of the First regiment, which was detached at Burkersdorf.

At the same time the senior aid returned from his trip to the division of the Guard, and reported as follows: "I

came across the advance guard of the division of the Guard as it was going through woods south of Rudersdorf. The division artillery had been brought to the front to support it. Only a weak force opposed it. I also found the division commander, Lieutenant-General M——. He intends—”

At that point the aid was interrupted by a staff officer's announcing that the corps commander was riding up with his staff along the highway, coming from Neu-Rognitz. Lieutenant-General A—— hurried to meet his commanding general, to whom he reported what he had previously directed his aid to report, but the aid had already delivered the message in Neu-Rognitz.

After the corps commander had said a few words in commendation of the work accomplished by the division during the day, both generals repaired to the top of Hill 635, from which point it was seen that the only changes in the situation were the entrance of the Third battalion of the First regiment into Burkersdorf and a further lengthening of the distance between the opposing forces. It was also noticed that the enemy was offering no resistance near Staudenz, and that the village was on the point of being occupied by other troops. In answer to the corps commander's inquiry as to what troops were near Staudenz, Lieutenant-General A—— replied that a part of the division of the Guard had advanced to that point, from which his senior aid had just returned. The aid was then called up to complete his report, and stated in addition to the above, that the Guard intended to take possession of Staudenz, but not to advance beyond it that day; also, that he had been informed that the Second division of the Guard had already reached Eypel.

The corps commander then resumed his observation of the enemy's retreat. It seems as if the opponent was occupying Deutsch-Praussnitz and Kaile with only his rear guard while he withdrew his main force into the mountains further to the south. All that remained north of the villages was a strong body of cavalry, estimated at about 4 regiments, for the purpose of covering the retreat of smaller detachments and the withdrawal of troops from Staudenz.

The artillery of both sides, near the highway, kept up a slow fire at a distance of 2 miles, but as some shrapnel

went too far and fell among the infantry of the Third brigade at Hill 635, it was planned to send the batteries there united further forward west of Burkersdorf under a hussar escort, to drive away the 2 batteries of the enemy; but before the order could be given, the latter limbered up and disappeared behind an undulation of the ground.

Lieutenant-General A—— ventured to disturb the corps commander's observations, asking that the troops be permitted to go at once into bivouac. His request was granted, the corps commander adding: "But if the enemy is still in his position to-morrow, I shall be unable to continue the march upon Arnau, and must attack him. I will therefore put myself in communication with the Guard corps. However, should the enemy have received reinforcements and himself advance to attack, your Excellency will hold your position on the heights here north of Burkersdorf, and later you will receive a written order. The First infantry division will bivouac around Hohenbruck."

The corps commander then went over to the battalions of the Third infantry brigade, which had in the meantime come up.

Colonel D—— had returned from Burkersdorf, and reported to the division commander as follows: "The village is occupied by the Third battalion. All that was found there of the enemy was a large number of stragglers, and so many wounded as to overcrowd the farm-houses. The thickets south of the village have also been evacuated."

Majors X—— and Y——, of the First and Third battalions respectively of the First infantry regiment, had been ordered up, and in their presence, as well as the presence of Major-General B—— and Colonel D——, the division commander issued the following order establishing his outposts:

Hill 635, northwest of Burkersdorf,

Division Order No. 2.

27 June, 5:20 p. m.

The enemy has retreated upon Königinhof and beyond Deutsch-Praussnitz.

The Second infantry division will go into bivouac near Nen-Rognitz.

The First and Third battalions of the First infantry regiment, together with the First squadron of the hussars regiment, will hold the line eastern exit of Ober-Altenbuch-Hill 592 (south of Burkersdorf)-Staudenz (exclusive), the First battalion and 2 troops covering as far as and including the Burkersdorf-Deutsch-Praussnitz road, and the Third battalion and 2 troops from there on to Staudenz (exclusive).

Connection will be kept up with the Guard at Staudenz.

Scouts will be sent out in the directions of Königinhof and Chwalkowitz.

In case of hostile attack, Burkersdorf and the heights on its west and east will be held.

As the division commander then looked around for the commander of the hussar regiment, to give him the orders for the First squadron, his general staff officer informed him that the regiment had followed the enemy and could be seen south of Burkersdorf. Lieutenant-General A—— was fully satisfied with this, but he directed a staff officer to go and fetch the First squadron back immediately.

Then he turned to the commander of the Third infantry brigade, and assigned him the region at the fork of the highways as bivouac for the 4 battalions (the Second battalion of the First regiment and the entire Second regiment) remaining under his command, cautioning him to leave room for the hussar and artillery regiments between his brigade and Neu-Rognitz.

Then the division commander despatched his senior aid to the Fourth brigade, with instructions for its putting the Third regiment into bivouac southeast of Neu-Rognitz, while the Fourth regiment remained where it was then located, the engineers attaching themselves to the latter regiment, and knapsacks being brought up, throughout the brigade, on requisitioned wagons.

In the meantime the adjutants of all independent subdivisions had gradually arrived. They were referred to the general staff officer, to whom the division commander had communicated his further wishes after charging him with the preparation of the order, and instructing him to repair to Neu-Rognitz, with the officers, for such purpose. Among

other things, the general staff officer was told to bring up the signal corps detachment and division bridge train, and to take especial care that the subsistence-wagons were brought up also.

Having issued these instructions Lieutenant-General A—— rode up to the First field artillery regiment, where the corps commander met him with the inquiry whether all orders had been given. Upon replying that it had not yet been done in the case of the artillery, the corps commander told him not to let his presence interfere with the issuance of orders.

Lieutenant-General A—— thereupon told Lieutenant-Colonel J—— to let his regiment go into bivouac west of the highway and southwest of Neu-Rognitz, behind the Third infantry brigade.

After that Lieutenant-General A—— asked permission to turn over the command of the Fourth infantry brigade to Colonel D——, commander of the First regiment; this request was approved by the corps commander, Colonel D—— being the senior regimental commander in the army corps. The wounding of Major-General C—— and the death of Colonel G—— were mentioned, when a lengthy discussion ensued concerning the losses and the course the engagement had taken; during this discussion, however, the two generals continued their observation of the enemy, whose last subdivisions were withdrawing via Kaile. In course of conversation the question of the enemy's strength came up and to what army corps he belonged. The task of collecting such data had been interrupted when the general staff officer was sent away, but it was recalled that the first reports compiled had shown that the First brigade of the Tenth hostile army corps had occupied the heights south of Trautenau, and the strong resistance which the enemy developed near Neu-Rognitz as well as to the east of that village, taken in connection with the fact that still other forces had opposed the Guard, led to the surmise that two other brigades had joined in the action; further, it was assumed that a fourth brigade had been in reserve, and the conclusion was reached that the entire Tenth army corps had been met and conquered.

Although no summary of the division's losses had been compiled, it was certain they were quite large. Neither could the number of prisoners be ascertained. Of other trophies it was said that 2 guns had been taken by a battalion of the First regiment, and there were also rumors of a color having been captured by the Fourth regiment. As a matter of fact, however, no one could be found who had seen either the guns or the colors, and no report thereof had come in; all that the party there assembled could see was a shattered limber lying on the southern slope of Peak 635.

The corps commander stated that during the night he would have an artillery and an infantry ammunition column, together with two subsistence columns, brought up, to be ready for distribution at 6 o'clock in the morning south of Hohenbruck.

The following telegram was then sent from corps headquarters to the headquarters of the Second Army:

Neu-Rognitz, south of Trautenau,

Telegram No. 1.

27 June, 5:45 p. m.

Victorious action of the Second infantry division against the enemy's Tenth army corps, which was driven from its strong position near Neu-Rognitz and pursued beyond Burk-ersdorf. Numerous prisoners. Our losses quite large. Colonel G—— killed. General C—— wounded. First infantry division arrived near Hohenbruck. Communication with the First division of the Guard established near Staudenz. Corps headquarters to-day at Trautenau.

Headquarters First Army Corps.

This despatch was taken to Liebau. Although the extension of the telegraph line from Liebau to Trautenau had been commenced as soon as the First division advanced, it had not yet been completed.

The division commander stated that he would quarter himself in Neu-Rognitz, and requested permission to go there in order to attend to the issuance of orders. This request was granted, and the corps commander thereupon went to inspect the Third and Fourth regiments, who were getting settled in their bivouacs; from there he returned to Trautenau.

Lieutenant-General A—— found that quarters had been prepared for him in one of the largest farm-houses in Neu-Rognitz. Except for this, everything was in great commotion. In nearly all the dwellings wounded were to be found, while still more were being brought in. Soldiers of many different organizations were wandering promiscuously, demanding supplies on their own responsibility. Squads in close order from troops near by came in to get water. The engineers were tearing down a couple of walls of a building that had been fired and threatened to fall. Timbers and doors were carried off by infantrymen for firewood. The wagons of an ambulance company were on the highway, having been sent ahead by the First division; but not without colliding with ammunition-wagons of the infantry and artillery. Among all these vehicles were several sutler wagons, strange as it may seem, while in some of the farm-yards not too thickly occupied by wounded the bands of three regiments have assembled.

All this confusion disappeared shortly after the division commander arrived. The ambulance company and wagons were sent into the open ground east of the village. The commander of the First battalion of the Fourth infantry regiment was sent for and instructed to quickly establish order. All stragglers were to be assembled and sent to their proper organizations. Those not seriously wounded and able to walk were to be sent back to Hohenbruck. The battalion commander was further instructed to rigidly insist on vehicles moving only in single file in any one direction upon the highway, and on the immediate vacating of the road by wagons obliged to halt.

After he had given these preliminary instructions, the division commander dismounted, and the general staff officer read to him the division order which had been prepared, and which was as follows:

Division Headquarters, Neu-Rognitz,
Division Order No. 3. 27 June, 1866, 6 p. m.

1. The outposts, consisting of the First and Third battalions of the First infantry regiment, with the First squadron of hussars, will be placed on the line eastern exit of Ober-

Altenbuch-Burkersdorf-Staudenz, connecting with the Guard at Staudenz.

2. The division will bivouac near Neu-Rognitz as follows: 4 battalions of the Third brigade near the road fork south of the village; north of these, the First field artillery regiment and the regiment of hussars (less the First squadron); the Fourth brigade with the Third regiment southeast of the village, and with the Fourth regiment (to which the company of engineers will be attached) east of the village. Lieutenant-Colonel J——, First field artillery regiment, will command the bivouac.

3. The staffs of the division and brigades will be quartered in Neu-Rognitz, the remainder of the village being reserved for wounded.

4. The heavy baggage will be brought to Neu-Rognitz. The emergency ration will be issued to-day.

5. At 9 p. m. orders will be issued at the quarters of the division staff.

(Signed) A——,
Lieutenant-General.

The division commander approved this draft, but instructed that in addition columns and trains for the replenishing of ammunition and subsistence stores would be ordered to report near Hohenbruck the following morning at 5 o'clock, and that statements of losses and ammunition needed, also reports of the engagement, should be handed in without delay.

The order was then dictated to the adjutants, who immediately returned to their organizations.

The next half-hour the division commander spent in resting and taking refreshments.

When all necessary orders had been issued, conversation drifted to whether anything had been overlooked. The events of the day were discussed, and opinions ventured on what the enemy would likely do the next day, also the tasks that might fall to the division and how they could best be accomplished.

Before 7 o'clock that evening the general was again in his saddle, and took one of his aids and rode over to the outposts, where we will find him later.

Lieutenant-Colonel J——, the bivouac commander, found the greater part of such troops as had previously been instructed with regard to bivouacs already occupied in making themselves comfortable and pitching tents. The Third brigade was at work preparing the emergency ration. The Fourth brigade was awaiting the arrival of its knapsacks. Major N——, commander of the Second battalion of the First regiment of infantry, was detailed as bivouac officer of the day. He posted a guard south of the fork of the highways, another near Hill 635, and a third south of the quarry near Sorge; also a special interior guard in Neu-Rognitz. These measures met the approval of Lieutenant-Colonel J——, who directed the troops nearest the village to post sentries at the entrances to control the intercourse of individual soldiers with the village. He designated Ober-Altenbuch as the source of water, wood, and straw for the 4 battalions of the Third brigade, and Neu-Rognitz and Sorge for the remainder of the troops; the latter were permitted to send officers' horses into these villages.

COMMENTS ON THE DISPOSITIONS FROM THE CONCLUSION OF
THE ENGAGEMENT (5 P. M.) UNTIL NIGHTFALL.

The division commander's order to send only 1 battalion to occupy Burkersdorf appears to be based on the fact that the enemy's retreat was a decided one. It is recommended in such cases to generally do too much rather than too little, and to put the nearest adjoining troops in readiness for support, even though the advance may seem devoid of danger. We can never foresee what counter-measures the enemy may undertake.

Lieutenant-General A—— did right in advising the corps commander of the enemy's retreat, and of the measures he intended to adopt. In the rush of events this is often overlooked, for one is inclined to speculate instead on what orders he himself is likely to receive. It is therefore all the more recommended, as we have previously remarked, for higher headquarters to furnish troops in action with an officer and some mounted orderlies or mounted riflemen and cyclists, a thing that corps headquarters here failed to do.

It may also be asked, "Why did the corps commander not remain near the division commander after his arrival on the battle-field?"

We answer, "He acted very properly in not doing so."

The division received its first orders while on the heights of Trautenau. If the corps commander had entered the fight and remained continually at the side of the division commander, he would have been greatly tempted to interfere in the latter's orders, and he, instead of Lieutenant-General A—, would finally be leading the division. In so doing he would lose a conception of the general situation. A corps commander must think of other things than his division commanders, who have been placed in their respective positions because the commander-in-chief felt they would do all they were called upon to do. Different people may handle a problem after different methods, but yet all arrive at its solution. Above everything else must a leader hold fast to a resolution that he has once made and made in a logical manner, for nothing is so pernicious as the attempting of two persons to lead the same body of troops after they have started out from different premises. The division commander is responsible for the execution of orders given him; all that the corps commander should do is to carefully watch them. Any corps commander who cannot resist the inclination to interfere in the execution of movements assigned to one of his divisions had better have been left with his own division and never been given command of a corps.

An effort to avoid this peril is responsible for the separation of higher staffs, as is so often witnessed on the battle-field.

We come now to another evil, which, unfortunately, cannot be altogether avoided. As soon as an engagement comes to an end, it is desirable for the corps commander to communicate personally with the division commander in touch with the enemy in front. By so doing the situation will become perfectly clear to him, and he will be able to sufficiently inform himself with regard to the enemy and the terrain. But this involves a considerable loss of time. We know from experience that many things are then discussed which, while no doubt interesting, are hardly suitable, in view of the urgency

of the moment. Let us imagine the consequences of such delays. The troops have observed that the engagement is ended. Naturally every one wants to rest after the great exertions and the dangers encountered. A bivouac cannot be established, as no place has been designated for one. No body of troops knows where to go, nor can tell whether it may not be detailed for the outposts. If patience becomes exhausted and an organization commences to establish a bivouac of its own accord, it runs the risk of being ordered elsewhere. We therefore insist that as soon as all measures regarding the enemy have been taken, under all circumstances, the first concern be the security and rest of the troops. Their strength is so often and so greatly tried that we cannot do too much to spare them.

In the case before us the appearance of the corps commander at 5:10 p. m. so disturbed the arrangements that they were not finished until 5:25, a quarter of an hour later than would otherwise have been the case. And when one has been on his feet for more than 12 hours, under oppressive heat and in a long, stubborn engagement, every minute of unnecessary delay before he can rest appears like an hour.

The narrative states that the corps commander expressed to Lieutenant-General A—— and the troops his appreciation of their performances. We should certainly advise no superior to neglect this, but, on the other hand, we would warn against excessive praise. When troops have done their best and suffered great losses, and the general rides past them without a word, a bitter feeling is aroused. Men of no class will stand being treated as if they were only chess-men, to be thrown back into the box when the game is over. It may indeed be true that every man has simply done his duty; but duty can be performed either well or poorly, and if we condemn for the latter, we must give praise for the former.

On the other hand, do not give excessive praise under the inspiration of the moment. The higher leader does not go everywhere during an action, knows nothing of the details, and may be easily led to bestowing merit where it has not been earned. The rule already laid down should suffice to check any tendency to excessive praising, and the limit of commendation should be, "You have done your full duty."

After a word of satisfaction has been spoken as to the

work performed, the safety and bivouac of the troops must be provided for.

The service of security was assigned to the First and Third battalions of the First regiment of infantry and the First squadron of the hussar regiment. When the engagement began the advance guard was abandoned, and there was no occasion for making up a new one for the evening. The First and Third battalions were selected not until their brigade commander had been consulted, and the First squadron, in the opinion of the division commander, had hitherto been called on for the least labor.

In this case the infantry nearest the front had been selected, for in all probability it was still in closest touch with the enemy, and at the same time was in a position to assure security at the earliest moment. Furthermore, it had been best able to take advantage of the last stages of the action for restoring order. These three reasons (touch with the enemy, ability to promptly afford security, and well-ordered troops) must always be considered in selecting the outpost. It frequently happens, however, that the most advanced forces have suffered most and are in the worst order; in such cases other troops must be selected.

For keeping touch with the enemy, cavalry must be employed. But, on the other side, the enemy will do all he can to keep it at a distance, for which purpose he will use his own cavalry. Therefore the First army corps must bring up all the cavalry it possessed to push the hostile squadrons back and obtain a good view of the real location of the opponent. The hussar regiment of the Second infantry division had very properly followed the enemy, and according to regulations must unquestionably remain at his heels until the cavalry outposts were established. But to establish outposts the First squadron had to be ordered back. The loss of time involved in this counter-marching could indeed not very well have been avoided, as the commander of the hussars did not care to delay his pursuit; and if he waited to learn which of his squadrons was to go on outpost, before starting after the retreating enemy, his pursuit would have little value and touch would be lost. The First cavalry brigade also should have been em-

ployed in the pursuit, and that this was not done must be considered an error on the part of corps headquarters:

The First cavalry brigade had undertaken a daring and successful attack, but by so doing exhausted its energy for the day of the 27th. Although it might not have been formed up again for a well-ordered pursuit, yet of its own accord it should have initiated measures for keeping in touch with the enemy. Its ambition to accomplish great deeds should not have died with one successful attack. The horse battery had certainly set it a worthy example, in that it had returned to the brigade after 5 o'clock.

In this case security for the division was provided by the outposts of the Third brigade. This might have been accomplished in still another way. When we consider the proximity of the enemy and also that the foremost troops were in a position which they had been ordered to defend in case of hostile attack, then each of the two infantry brigades might have covered themselves by outposts in their immediate front.

Such a course would have to be pursued if the engagement had not ended until darkness set in and both parties had remained closely opposite each other, whether because they had no strength left to crowd the opponents back or for other reasons. Then there would have been no room for establishing outposts far to the front in the regular manner, and the forces would have to be content with pushing forward separate companies or battalions at short distances. These would cover themselves by skirmish lines, and maintain connection with adjoining bodies by so-called halting patrols, or, as Field Service Regulations express it, standing facing the enemy ready for action.

The nearer we are to the enemy the more must we make use of this form of security, and at short distances nothing remains but to let troops rest on their arms in the position they occupy and have them bivouac in rigidly tactical battle formation. Many examples of this may be found, especially when a decision has not been reached at nightfall. Such measures should, however, be resorted to only when absolutely necessary, for it is plain that the nearer the covering troops are to those who are resting the more will the latter be disturbed and the greater their imminent danger. Therefore, wherever

practicable, as in the case before us, outposts will be formed well in advance. These must be strong enough to repulse an assault by any small hostile parties, and delay the advance of larger masses long enough to enable the main body to prepare for action.

The details in the establishment of outposts is no concern of a division commander; they belong to the duties of the outpost commander. There were two outpost commanders in this case, as two outpost sections had been formed. All the division commander has to do is to designate the positions to be held, approximately the line on which the outposts shall be placed, the location of the wings, and the connection with adjacent bodies. Instructions for outposts should also include such points as pertain in particular to reconnaissance; such was done in Lieutenant-General A——'s order of 5:20 p. m. At any rate, only the simplest measures were necessary in this case, as the enemy had been beaten and a night attack was certainly not to be expected. Therefore 2 battalions and 1 squadron were sufficient for the entire corps. If it should come to the worst, the troops in bivouac would soon be ready for action. The division commander could also be promptly on hand to order up supports, should the outposts be attacked.

It goes without saying that the division must cover the flanks as well as the front; but to do so, it was not necessary to scrupulously guard the entire field, as it would suffice if only the main points were held. The right flank was covered by the detachment sent to Ober-Altenbuch, and the presence of the Guard made support on the left unnecessary. The First infantry division, camped near the main road to Arnau, should provide for its own security.

After these orders had been issued, the division commander's next duty was the assignment of bivouacs.

In grouping bivouacs it is well to bear in mind what it is proposed to do the following day. For the time being no one knew whether the enemy would again be attacked in the morning, or the corps would take up its original task of gaining the Arnau road by marching to the right. This much was certain, however, that until the situation cleared up, a formation would be adopted that would successfully resist any attack the enemy might make. Yet the grouping of the biv-

ouacs should provide for both contingencies. Were a frontal advance to be made the following morning, the commander of the First regiment would form up the advance guard with his own regiment, supported by the Second regiment of the same brigade. But should it be decided to go to the west, then the First regiment would find itself charged with forming a left flank covering, while the rest of the Third brigade would be ready to furnish the advance guard, and the Fourth brigade, which had been kept close together, the main body.

In case the enemy should attack, first the line of hills north of Burkersdorf would be held, and the troops were so situated that the Second regiment and the Second battalion of the First regiment could defend the heights west of the Neu-Rognitz-Kaile road, and the Third regiment the ridges east of the road.

It may seem strange that the first line of defense should be held by regiments of two different brigades, while we have time and again insisted that the management of an engagement should be left in one hand. So far, in these studies, we have confined ourselves exclusively to the offensive. It will be permissible here to devote a few words to the defensive. Hitherto we have pointed out repeatedly that connected leading can only be assured by deepening the formation, and never by lateral extension. Troops fighting in front must receive their immediate support from troops belonging to the same organization, else co-operation cannot well be secured. Just remember that in defense also the troops on the first line are weakened by losses and fatigue, and that it becomes evident that in time they will need immediate support, and that the troops on the entire line alongside of them will be in the same condition. It is therefore recommended in defense never to assign to a body of troops any section the holding of which necessitates their entire strength to be developed at the start, but rather, as was done in this instance, in the case of a division, to assign to each brigade at once a portion of the first line of defense, and to hold back in reserve and at the disposition of the division commander, such battalions as are not required for this purpose. The commander can reinforce the line of defense, or initiate a counter-attack, if necessary, with these reserve battalions.

Where this principle was neglected in the campaign of 1870, a connected direction of the action was not possible, and in almost every case injurious results can be pointed out.

In the defense of the position north of Burkersdorf, the Second division, strengthened by a part of the corps artillery, was sufficient to hold the hills from Peak 635 (west of the highway) to the old quarry at 591, against any frontal attack. The hills could be held by the Second regiment and the Second battalion of the First regiment, and the ground from the Kaile road up to the old quarry by the Third regiment, while east of the quarry the Guard could be depended on. After leaving their outpost positions, the First and Third battalions of the First regiment could pass along the highway behind the right wing, where they should remain in close order to secure that wing. The Fourth regiment could remain in reserve near Neu-Rognitz, from which position 5 or 6 battalions could go out around the right wing and easily advance to a counter-attack with 5 to 6 battalions.

The division artillery regiment could take station on Hill 635, while part of the corps artillery could reinforce the left wing. The hussar regiment could establish itself behind the right wing, and at once send out patrols to secure the right flank.

From this it is evident that a division on the defense can secure a stretch of about a mile and a half against any frontal attack, when it is formed up so as to afford itself some support; in the offensive, on the other hand, we can expect it to make a successful attack only when its front does not extend more than a mile. We hardly need add, however, that these figures can serve only for general guidance.

Including in this scheme the entire army corps, we might imagine that at the opening of the action the First infantry division would be assembled near Sorge with the remainder of the corps artillery and the cavalry brigade, where it could be ready to extend the fighting line on the right wing by a brigade, or to undertake a counter-attack against the enemy's left with its entire force, especially in the direction of the Königinhof highway, which was an important point in the problem.

But let us return from this digression to the bivouacs. It may seem strange that, in spite of verbal instructions given on the spot, a written order should later be issued at Neu-Rognitz. This was, however, entirely proper. In the first place, it is necessary that after the close of an engagement every superior commander not only await what may be ordered, but on his part also do what he can to learn the intentions of his next superior as quickly as possible. This required that the adjutants of the infantry brigades, the artillery, and the cavalry regiment, also an officer from the engineer company, should try to find the division staff. These officers would at the same time be in position to give the division commander the necessary information concerning the momentary positions of their subdivisions, and what they had last seen of the enemy, all of which he had not yet been able to survey perfectly from his station. There they would receive the first necessary orders, in case the same had not already been despatched. It is evident, however, that such orders would be given under pressure of the moment and contain only the most urgent directions, and mistakes could very likely arise in their comprehension. Besides, when one adjutant goes and comes by himself, only such knowledge is gained as pertains to his particular body of troops. It is therefore wise, after quiet is restored, to embody these separate orders into a written one. Then errors will be avoided, each party will obtain the needed survey of the whole, and the troops put in order again more promptly, since each body will be able to direct at once to their proper organizations stragglers who have joined. Furthermore, after a short time other matters must be considered, such as the issue of rations and ammunition, regarding which the general staff officer cannot give the necessary directions immediately after the engagement, but must wait perhaps an hour before he can know where the ammunition columns are stationed and what arrangements may have been made by the field quartermaster.

The assignment of new commanders, made necessary by losses in action, was here arranged after the engagement. Circumstances will largely determine the time for making such details, as often command must be assigned during action. It would ordinarily be best to let a commander continue lead-

ing his own troops when once engaged, unless it should become necessary for him to take the place of his immediate superior. If Major-General B—— had been disabled, Colonel D—— should have immediately assumed command of the Third infantry brigade, as a matter of course.

Despatching a telegram after an action has in view the advising of superior headquarters, when these can only be reached by wire, and also the sending of news home. The justice in promptly advising those at home regarding events in the field has always been recognized. When the fate of the country is at stake, when the entire populace are making great sacrifices, when members of every family are in the field, it is certainly the duty of superior headquarters to send news home as quickly and as exactly as circumstances will permit. Although conditions usually prohibit the telling of everything that has happened, what is told must be based on the truth. This would seem to be a foregone conclusion; nevertheless experience has shown that all armies do not pursue such a course, and history furnishes proof of misrepresentation, exaggeration, and even lies being found in official telegrams. Such is indeed deplorable, and injurious effects will never fail to follow, for the truth will in the end be learned, and its depressing effect will be more severe than otherwise.

Now the questions arise, What should a telegram intended for publication contain? and, Who has authority to send such a message? As for the first, the public's desire for news, although in itself justifiable, sometimes exceeds all proper bounds, and headquarters should not allow itself to be carried away by relentless displays in newspapers. It is evident that people at home like to know as much as possible, that news from the seat of war is expected daily, and that if nothing is received, the public becomes impatient. But news is not made every day, and communication is often disturbed when the theater of war is much extended and is in the enemy's country, and headquarters itself is not always in possession of advice from the widely separated armies. Headquarters in such cases can only report what occurs within its own sphere of vision, and if nothing happens, no news can be sent home. But if there is still an unrest which must be

satisfied, all that remains to do is to wire back, "Nothing new to-day."

Moreover, too much care cannot be exercised regarding the contents of despatches.

Just remember that news published in the capital of our own country to-day is known on the same day in the capitals of neutrals, and may be sent from there to the hostile camp. Such telegrams must therefore contain nothing that the enemy is unable to learn through other channels, nor anything from which he can benefit. Even the dating of a despatch may be dangerous, as the opponent may thereby easily draw important conclusions concerning your position. At the outbreak of the war of 1866 the Second Army did not know whether the main Austrian army was still around Olmütz or had started for Bohemia, and would have given a great deal to learn the location of Field Marshal Benedek's headquarters.

An exact statement of the positions of the various army corps must also be avoided; the enemy would certainly have cause for thanks if this were done. In the same manner also we must avoid disclosing our intentions, else we turn traitors to ourselves. Care must also be taken in stating losses and number of prisoners taken; this cannot be accurately done immediately at the close of an engagement, and at first we had better resort to the general expressions "losses heavy" or "very considerable." Caution is advisable, too, in stating the number of colors or guns captured; commanders must await official reports on these points, or should have personal knowledge; else errors will arise, which will later cause the reliability of all telegrams to be questioned.

Telegraphic news, as far as it relates to the war situation, should emanate only from the headquarters of armies or other independent forces; in this way alone can the publishing of dangerous statements be avoided.

Sending telegrams from detached army or corps headquarters to superior headquarters is governed by different principles. In such case it is important, after narrating events, to give exactly the final position of troops, as well as news about the enemy and what we intend to do the next day. But all this is information which must be kept out of

unauthorized hands, and should be sent only by cipher. Accordingly when all members of a staff accompany the commanding general on a ride, the cipher key must not be left behind. This is especially necessary in the case of telegrams sent to the front, which often contain instructions that require immediate attention.

THE OUTPOSTS OF THE DIVISION FROM 5 P. M. UNTIL
NIGHTFALL.

(See Map VII.)

We saw that the Third battalion of the First regiment advanced to Burkersdorf at about 5 o'clock and occupied that village.

The hussars followed the enemy, who was withdrawing in a southerly direction. On the right wing the Fourth squadron advanced to the thickets near the Königinhof highway and southwest of Burkersdorf, the remainder of the regiment taking position north of the woods which crown Peak 540. From both points troops were sent forward singly, one into the country west of the Königinhof road, another on the Burkersdorf-Deutsch-Praussnitz road to a line with the next rise in the ground, and another along the Neu-Rognitz-Kaile road to the large strip of meadows. Some officers rode in advance of the troop scouts, followed by two or three selected horses. They made no headway to the front in the face of the enemy's cavalry; they nevertheless learned that it consisted of 4 regiments—1 of uhlans, 1 of dragoons, and 2 of cuirassiers. On the left communication was established with hussars of the Guard division, from whom it was learned that Kaile had been occupied by hostile infantry, which had fallen back in a southerly direction, and that there were a few battalions and a squadron southeast of Kaile apparently engaged in posting outposts toward the Kaile-Ober-Raatsch road.

One of the officers sent out on the right wing had meanwhile succeeded in getting a tolerably fair view from the heights near Soor, into the opponent's position at that point. At 6:30 he returned and reported that a hostile rear guard of about 3 battalions and 2 batteries had kept possession of the windmill hills (603 and 609), and had later sent a battalion beyond Ober-Soor; further, that this rear guard was evidently preparing to go into bivouac south of Ober-Soor;

also, that no other hostile bodies were seen in that region, nor any columns marching further beyond or any on the highway to the south.

Shortly afterwards messages were received from other points where officers were in observation, to the effect that the hostile cavalry was withdrawing via Kaile on Chwalkowitz, but the officer who had advanced farthest on the Burkersdorf-Deutsch-Praussnitz road reported that there were still strong hostile patrols in the latter village.

In the meantime the troops had taken up the two outpost positions under protection of the cavalry, and had been joined by the squadrons of hussars. The information derived from the personal reconnaissance of the commander of the hussar regiment and other reports received concerning the enemy were considered quite sufficient, and until darkness should set in only slight changes could occur, which a few horsemen could observe very well. This regiment was accordingly placed in bivouac by its commander southwest of Neu-Rognitz, having dismounted about three-quarters of an hour before and watered, by sections, in Burkersdorf. Pursuant to orders, the First squadron remained with the outposts. The officers in front were instructed to continue their observation of the enemy as long as daylight permitted, and then to return.

A survey of the ground from the outpost position showed that Burkersdorf lay in a depression almost completely encircled by heights, and although it was still necessary to hold the village as a point of support on the main road, it was evident that the outposts must be pushed forward on the surrounding hills far enough to obtain a sufficiently good view ahead.

The enemy had long ago abandoned the thickets lying in front, to which the hussar regiment had advanced, securing the infantry against surprise by detachments sent forward. It was now important to occupy first the prominent points, under cover of cavalry.

About 5:30 Major X— assembled his battalion (First of the First regiment) near Hill 635, and about the same time issued the following outpost order to his 4 companies (there being also present a non-commissioned officer of hussars):

Hill 635, 27 June, 5:30 p. m.

1. The enemy has fallen back via Ober-Soor and Deutsch-Praussnitz. The main body of the division will bivouac near Neu-Rognitz. The division staff will be quartered in Neu-Rognitz.

2. The First battalion of the First regiment, with the First and Second troops of the First squadron of the First regiment of hussars, will secure the line eastern exit of Ober-Altenbuch—Hill 592—Burkersdorf-Deutsch-Praussnitz road, inclusive.

The First company, with 6 mounted orderlies and 2 cyclists, will secure the line from the eastern exit of Ober-Altenbuch to the wooded meadow, inclusive. The Second company, with 6 mounted orderlies and 2 cyclists, will take position in the thickets north of Hill 628 on the Königinhof highway, and secure the line from the wooded meadow to the Burkersdorf-Deutsch-Praussnitz road, inclusive. Until 7:30 p. m., the First troop of the First squadron will be responsible for security in front of the Second company, and will reconnoiter via Ober-Soor and Deutsch-Praussnitz.

The outpost reserve will bivouac at the southern exit of Burkersdorf. During the night the hussars will occupy alarm quarters in Burkersdorf, 1 officer and 10 hussars remaining with the reserve.

3. In case of attack, Hill 602 and Burkersdorf will be held.

4. I will be with the outpost reserve.

After this order had been issued, the commander of the First company had his troops fall in and started them at once toward Ober-Altenbuch on the road from Burkersdorf, while he himself rode ahead to the mountain spur 383. He considered that he would be better able to oppose an enemy advancing from Ober-Altenbuch at that point than in the village itself. He left the company at the fork of the roads southeast of the village, only establishing a non-commissioned officer's post on the village street. He took only a lieutenant and half a platoon to the wooded meadow, where he established a picket maintaining connection on both sides by patrols. Returning to the company at 6:30, he found that the

6 mounted orderlies had at last arrived; two of these he immediately sent to the second picket (at the wooded meadow), and one to the bivouac of the main body to obtain information regarding the measures of security ordered. A cyclist was assigned to the non-commissioner's post in the village, and at the same time the post was designated as an examination post. After the captain had seen to it personally that the men of the outpost company (still about two platoons) had taken off accouterments and started cooking, he sat down, before he himself partook of any refreshments, and, using a message card, addressed a communication to the outpost commander, containing information relative to the posting of his own company, and on the back of the card hastily added a sketch in pencil. It was not until 7 o'clock that he could find time for a short rest.

Shortly after this a message was received from the commander of the Second company, containing information as to how the latter company had covered itself, and the commander of the First company gave the mounted orderly who brought the message a short account of his own position. At the same time Lieutenant-General A—— arrived, to whom the captain also reported. The former found no fault with the dispositions made, and only inquired whether regular patrols in the village of Ober-Altenbuch had been established, and whether a double post had been sent out on the road to the wooded meadow. To both of these questions he received an affirmative answer. By that time the men had finished their cooking, the victuals for the non-commissioned officer's post having been sent out to it.

As for the Second company, it was preceded by a point, and went west of Burkersdorf to the little woods north of Hill 628, and when the company commander observed that the outpost cavalry had already taken station further to the south near the highway, he contented himself with putting a double post only in the southern border of the little woods. In close order the company prepared at once for cooking in the woods, whither a non-commissioned officer fetched water out of the village by a wagon. The outpost cavalry had made no efforts to establish communication with the company, not even sending in a mounted orderly; the company commander

therefore himself rode forward to the cavalry picket to learn what dispositions it had made. The mounted orderlies in this case had erroneously ridden to the outpost reserve, and were brought back by a cyclist. After infantry patrols had meanwhile established communication with the Second picket (at the wooded meadow) of the First company, the commander of the Second company ordered that for the night a First picket should take post at the southern boundary of the little woods, and a Second picket on the same line, on the Burkersdorf-Deutsch-Praussnitz road. On account of the proximity of the enemy, the pickets, each half a platoon, were forbidden to pitch tents; the company, however, pitched tents in the little woods, with the doors facing the enemy, so that the men could fall in without loss of time.

The First and Second troops of the First squadron of the First hussars received the outpost order at 5:45 at the southern exit of Burkersdorf; the squadron commander was present. Immediately the First troop started at a trot down the Königinhof road, halting at the point of woods extending east from Nieder-Soor, and sending forward a vedette of 2 men, who were ordered to remain mounted. A dismounted vedette of 3 men was posted on the Burkersdorf-Deutsch-Praussnitz road. Patrols of 2 men were sent forward to Hill 610, east of Ober-Soor, and toward Deutsch-Praussnitz, who learned that nearly a mile south of these villages the enemy had established a cavalry outpost line. The squadron commander had gone over to the left division of the outposts, to supervise the cavalry on that wing. The remainder of the Second troop had remained halted south of Burkersdorf, and at 6 o'clock were permitted by the outpost commander to put their horses in stables.

As for the outpost reserve, Major X—— (First battalion of the First infantry regiment) led it up to the southern exit of Burkersdorf and sheltered it there in barns. On account of the proximity of the enemy, soldiers who had removed their accouterments were directed to remain close by them; this was in accordance with regulations. Men trained in field fortification prepared the southern boundary of the village for defense, under the supervision of a lieutenant. Major X—— had ridden out to the Second company, on

the Königinhof highway, but as soon as he detected large bivouac fires on the horizon south of the villages lying in front, he returned to the reserve, where he found reports regarding the positions of the First and Second companies, also a report prepared by his adjutant embodying these; and the latter he signed and forwarded by a cyclist to the division commander in Neu-Rognitz, with information in addition that the main body of the enemy was in bivouac 3 to 4 miles south of Deutsch-Praussnitz. At 7 p. m. he had received no advice from the outpost on his left; he accordingly sent a mounted rifleman thither with a sketch of his own position. Shortly afterwards the First troop of hussars returned, and the horses, which were considerably worn out, were sheltered in Burkersdorf. A very large number of these hussars had not yet been supplied with warm victuals, so the outpost reserve promptly furnished them some canned food they had prepared. A cavalry patrol still remained north of Deutsch-Praussnitz. At 7:30 an officer and 10 hussars of the Second troop reported to the outpost commander, who directed that a patrol should remain permanently during the night north of Deutsch-Praussnitz; he also directed that the mounted men of the Second company should patrol on the Königinhof highway. The officer of hussars was to report at daybreak for special instructions.

Major X——— dispensed with supports for the protection of the reserve, as the pickets appeared sufficient; but, besides the double posts established to the north, he also placed double posts at the exits of Burkersdorf. He quartered himself on the village street in a tent improvised with pieces of shelter tents, the spot being marked by a large stable lantern. Close by him were trumpeters, cyclists, and 2 mounted riflemen.

The Third battalion of the First regiment, under Major Y———, had reached Burkersdorf when the order was issued establishing the outposts. The commander had received the order on Hill 635, whence he galloped back to his battalion, but issued no outpost order, only directing the Ninth company to march to the little woods which lay on the Neu-Rognitz-Kaile highway close by and north of the creek running to Staudenz, and the other three companies to take posi-

tion as reserve in the thickets east of Burkersdorf. Major Y—— then rode out of the village in a southerly direction, to hunt up the outpost cavalry assigned to him. The Third and Fourth troops of the First squadron he met close to the southern edge of the village, and proceeded with them toward the little woods to which the Ninth company had been sent, where the company commander and senior officer of hussars were given the necessary information regarding the retreat of the enemy, the location of bivouacs, and the boundaries of the two outposts. Major Y—— ordered a non-commissioned officer's cavalry post to establish itself in advance half-way to Kaile, but otherwise left the hussars and Ninth Company remain as picket. The picket infantry at once started its cooking, and placed a double post at each of the two crossings of the creek. Major Y—— was satisfied that the creek could be crossed only by infantrymen in single file, as it was very swampy, and he therefore approved of the proposition of the company commander to establish only a post under a non-commissioned officer in the thickets west of Staudenz, for the purpose of effecting communication with the outposts of the Guard corps. He ordered scouting to be kept up continually during the night in the direction of Kaile, leaving 10 hussars with the company for that purpose. At dark the remainder of the cavalry should go to the outpost reserve, and the double post on the highway should also assume the duties of an examination post. In case of attack, the Ninth company was to oppose the enemy in its position, while Hill 540 would be occupied by the reserve.

When Major Y—— returned to the reserve he found Lieutenant-General A—— there, who received a report on the dispositions made, and, as they seemed to be absolutely correct according to the map, the division commander left for the outpost on the right. Major Y—— then reduced his report to writing in the form of a message without waiting for a report from the Ninth company, as he knew its location exactly.

Meanwhile a message came in from Major X—— relative to the position of the right outpost. But as Major Y——'s mind was not fully clear as to the connection of his defensive line with the First battalion of the First regiment,

he rode up to Hill 540 before it was yet dark, and sent word to Major X——, by a mounted rifleman, that in case of necessity he would occupy the woods on that height.

When the outpost commander did finally sit down near the bivouac fire at the outpost reserve, he was accosted by the battalion quartermaster, who came riding up on a wheel to report that the baggage could not possibly arrive before midnight. Major Y—— accordingly had shelter provided for himself out of pieces of tents belonging to the troops, and sent his horses to Burkersdorf, to which place he also permitted all but 4 hussars to repair, on the request of the senior hussar officer.

COMMENTS ON THE ESTABLISHMENT OF THE OUTPOSTS.

The hussar regiment acted very properly in following the enemy and keeping touch with him, and thus covering the establishment of the outposts.

The movements of the regiment illustrate the manner in which the first of these measures should be performed. Had its forces been sufficient to engage the hostile troopers in the plain before Kaile, under all circumstances an attempt should have been made to throw them back upon their retiring infantry; for if they should succeed in this, it would then be an easy matter to obtain information of the enemy's whereabouts, which would be useful not alone in planning the movements of the army corps for the following day, but also in establishing outposts.

But the hussar regiment found itself opposed to a force four times its own strength, and as long as this remained on the ground it was not in position to advance at will. Therefore all that could be done was to push out scouts for observation, and to try to send expert officers into the flanks of the hostile position. At the same time the regiment must not neglect to provide cover for the outposts while they marched into position. The positions the outposts were directed to occupy could not be reached by the several detachments simultaneously, only at different times. And until the extended outpost line (nearly 3 miles long), which was in itself to be the means of security, was established, protection must be provided farther to the front; this duty is explicitly enjoined

on cavalry by Field Service Regulations (paragraph 132). But the space to be covered was so broad that the regiment could not perform it from a single position; its squadrons could not reach a point soon enough to prevent any sudden dash of bold reconnoitering parties of the enemy. Therefore it was necessary to divide the regiment. The bulk of the regiment was posted opposite the enemy's principal force, at the thicket near Peak 540, and on the Königinhof highway only 1 squadron was employed. This single squadron would doubtless be adequate for protection at the place it was assigned, as the enemy's main forces had evidently not withdrawn over that road.

Finally, after darkness came on the hostile cavalry could not remain longer in close proximity, and as soon as its infantry had established itself near by it could withdraw behind the latter and go into bivouac. If, however, by that time the hussars had not been able to get a good look at the enemy's foremost line, they must still keep at the heels of the hostile cavalry, and not turn back until they had seen the infantry outposts and been fired upon by them, unless they had succeeded in obtaining an adequate view of the enemy's position on other roads.

The commander of the regiment of hussars, Lieutenant-Colonel H——, led his force into bivouac after the outposts were established, having first detached the outpost squadron. Under existing conditions this appears correct, as cavalry is not able to operate successfully in large masses during the night. The one squadron which remained at the front was sufficient for any duty that may be demanded of the cavalry later in the evening or during the night. We must not forget that the closer a body of troops bivouacs to an enemy the less rest will it obtain during the night, and such cavalry as is not needed at the front must therefore be sent to the rear, but not so far to the rear that they cannot be on hand promptly the next morning.

The duty of reconnaissance and protection was taken up by the infantry of the outpost after the cavalry withdrew. As the day advanced it became especially necessary to guard the bivouac of the division against surprise, and to accomplish this result the advanced bodies must be so connected and

sheltered by the ground that they would be able to defend themselves successfully against small hostile parties, and offer resistance in case of more extended attacks during the night or in the early morning long enough to give the main body time to form for action. This requires that they be posted as near together as possible, which explains the manner in which the heights surrounding Burkersdorf were occupied.

According to Field Service Regulations (paragraphs 128 and 129), it was not necessary to provide for readiness for action, as the engagement had ended with the retreat of the enemy, and the simplest measures of security would suffice. To detail an advance guard after the fight would only have given rise to unnecessary intermediate commands, and under the circumstances it was entirely right in the division commander's giving the orders for the outposts direct to the commanders concerned. In time it was learned that the enemy had established outposts about 3 miles away, and 1 battalion might have sufficed for providing the division's security, if a special detachment had been sent from the main body toward Ober-Altenbuch; but the location of the two roads leading toward the enemy and the proximity of the latter made it advisable to put 2 battalions on the outpost line, assigning to each the defense of a particular road. Night was approaching, and in the night troops move only on established roads. If, therefore, the two highways and the wagon-road between them were occupied, no surprise need be feared. On the left was the Guard division, and on the right (toward Ober-Altenbuch) the outposts were covered by an almost impassable stretch of wooded mountains, which an enemy would hardly dare to enter during the night. Surprise from the west of Ober-Altenbuch was practically out of the question, as the patrols had not seen a sign of the enemy in that direction during the entire day. By 2 battalions the division was amply secured.

As for division order No. 2, issued at 5:20 p. m., establishing the outposts, it contained all that was worth stating, except that the defensive positions of the outposts were not distinctly indicated. But on this latter point the division commander was again obliged to interfere in the dispositions of his subordinates, this being during his ride in the evening,

when he ordered that the First battalion of the First regiment occupy Hill 602 and Burkersdorf, and the Second battalion Hill 540 and the creek crossings. The defensive positions of the outposts were unfavorable. Burkersdorf lay low in a valley, and Hill 540 was a little too far to the front; but, as the position was one that must be defended during the night, it was necessary to secure the village and the roads. The main point was to hold the enemy until the division could occupy the line Hill 635-old quarry, and this could be accomplished in half an hour.

The commander of the right outpost, Major X——, issued a comprehensive order, covering practically every point necessary. He could do so, as he was able to overlook the terrain of his position from Hill 635. No material fault can be found with his dispositions. It may seem strange that only 6 mounted men should be used on the right wing, near Ober-Altenbuch. But the country there was quite mountainous, nothing had been seen of the enemy, and to simply close the village street with infantry was sufficient. The First company was very properly stationed on the Ober-Altenbuch-Burkersdorf road, and made sure that the main body of the division had placed sentinels and sentry squads on the roads leading from Ober-Altenbuch to Neu-Rognitz. As it was without cavalry protection in front, the company was at once obliged to send out the non-commissioned officer's post and the picket. With the Second company, however, it was different; the husar picket on the highway afforded it such security that it was able to go about its cooking in perfect composure.

Another thing is to be observed here. Outpost cavalry is ordinarily not subject to the orders of an outpost company behind it. Although Field Service Regulations (paragraphs 149 and 182) specify that infantry and cavalry must advise each other as to their respective locations, experience shows that often this is done too late. Very frequently it happens that a company commander, his horse all tired out, must himself search out the cavalry in front to determine the degree of security of his company. Especial stress must be laid on the detail of mounted orderlies for such outpost companies, and their prompt arrival ready for service, for in their ab-

sence a company commander is without the most essential mediums for sending reports and establishing connection with outpost cavalry and adjoining posts. Major D—— took the greater part of the cavalry back into the village. This was allowable, and is certainly advisable when horses are fatigued. But it was absolutely necessary, as was done, to keep a cavalry patrol close to the enemy during the night; and in this case the patrol was despatched from the outpost reserve. The Second outpost company could well patrol the highway with 6 mounted men.

Major Y——, on the other hand, established his outposts in an entirely different manner. In the first place, he issued no exhaustive order, as he did not clearly comprehend the situation, and in so doing he was acting in accordance with Field Service Regulations (paragraph 139). It was quite clear that the bridges over the creek running in the direction of Staudenz must be occupied, but whether additional measures should be taken depended upon the character of the creek and its surroundings. At first he took forward only 1 company, thus saving the others unnecessary exertion, for he found that on account of the swampy nature of the ground the creek could be easily held by a single company. The establishment of a cavalry post under a non-commissioned officer out on the Kaile highway was more than enough, as an infantry post would have answered the same purpose. The horses were tired, and should have been spared as much as possible. On the right of the outpost line Major X—— took his hussars to the outpost reserve before nightfall; but Major Y—— employed his as picket with the Ninth company. Yet there is no fixed rule for outpost measures. Major Y—— acted under the impression that strong hostile cavalry had been observed north of Kaile as late as 6 p. m. The cavalry patrols sent out by both outposts, from the outpost reserve on the right and from the picket on the left, were absolutely necessary. Major X—— preferred to supervise the despatching of his cavalry patrols in person, as he wished to give them special instructions.

The action of both outpost commanders in assigning stables for their surplus cavalry is very commendable.

Major X——— designated the outpost reserve as his line of resistance, while Major Y——— designated the supporting company on picket duty. Both were right in view of the character of the terrain. The essential principle is this: You must hold your ground until the main body is ready for action. Notwithstanding this, to allow oneself to be annihilated in so doing would be a serious mistake.

THE MAIN BODY OF THE DIVISION FROM 5 P. M. UNTIL NIGHTFALL.

As soon as the respective adjutants returned from the division commander with orders regarding bivouac sites, or the same were received by orderlies from the division headquarters, the brigades immediately proceeded to the assignments in detail.

As previously stated, the number of men in the various battalions was greatly reduced; soldiers who did not know where their regiments were located joined the body of troops nearest them. The written order issued from Neu-Rognitz threw some light for the first time on the position of the troops, but darkness was setting in, and many of the men were so tired out that they must be allowed to pass the night where they were; they were mustered, however, and regularly distributed to the various bodies of troops.

A desire for rest, after the oppressively hot day, was uppermost in the majority of the organizations; nobody was inclined to cook; hunger was appeased with bread, bacon, or anything the men happened to have in their haversacks. Water-carriers were detailed to bring water from the nearest villages, under the supervision of officers, and detachments were sent back to the places where the troops were engaged, to look for any wounded possibly left on the battle-field. Exhaustion was too great to permit of the burying of dead, but bivouacs were cleared of the bodies and arms collected in piles.

To be ready for further operations, cartridge-wagons were brought up to some of the battalions, and the pouch ammunition replenished. In other battalions this had to be left until the next morning, as the proper vehicles could not be found. In part of the Fourth regiment of infantry it had been necessary to replenish ammunition even during action, espe-

cially in the case of the troops on the right wing, which had fired their last cartridges early in the action. Cartridge-wagons would not be refilled until the distribution from the ammunition column, which was ordered for the next morning. In the artillery, the First battalion fired 803 shots, and the Second battalion 1,600; so a single ammunition column could replenish them.

COMMENTS ON THE BIVOUAC OF THE MAIN BODY.

The picture we have briefly described in this instance will generally be presented after every action. The greater the strain has been on troops the less will their strength be and the more difficulty will we have in meeting the demands of theory.

We must nevertheless make clear to ourselves what these demands are, and strive to fulfill them as far as permitted by circumstances and the strength that is left. In any case, we must at least endeavor to know what this ideal is.

The first thing is to get the troops ready to fight again. This includes re-establishment of order, replenishing of ammunition, and finally the revival of strength.

As for the first, we have attempted to indicate ways and means by which much can be accomplished even during an action to maintain the cohesion of the separate bodies. The more regiments and brigades are kept from being mixed the more promptly can this be accomplished. Yet this is always difficult, and at times impossible; but the more stress we lay on such measures in peace maneuvers the more attention will be paid to them in battle. The greatest obstacle in this direction is the excessive extension of the fighting line, a fault which we easily succumb to even in peace. This can be partially obviated if care is taken, either on the defensive or the offensive, never to deploy a body of troops in such manner that at the start it will all be on the first line.

Whether proper attention has been paid during an engagement to the preservation of channels of transmitting orders and to the retaining of formations once adopted, in any case, when the fight is over, we must endeavor to establish certain central points for the assembling of scattered elements.

Such points would naturally be with the reserves, but if the reserves too have been employed, then we must resort to such dismembered fragments of battalions or companies as may still remain within the hands of some leader, and in part at least assembled. With these the first dispositions must be made; they are still fit for use, and may be posted in certain permanent places. A large majority of stragglers will naturally attach themselves, and thus regiments and battalions may be formed up again. The importance of collecting the scattered men and dissolved organizations, at the earliest possible moment, and assembling them into larger bodies, is very apparent. And even if not a single body in close order is to be found near the fighting line, every officer must nevertheless appreciate the necessity of gathering as many men as he can around him, regardless of their organizations, and conducting them to where he may expect to find assembled masses.

When, however, utter dissolution reigns after an action and darkness has settled down, it is hardly to be expected that order can be re-established during the night. In such cases the division commander will halt the subdivisions farthest to the front and charge them with the task of security, and will then repair to any body that may happen to be bivouacking at some important point, generally near a highway, and will pass the night there, for not until morning will it be possible for him to bring order out of chaos.

In the example under consideration, order had been re-established in all regiments after the close of the engagement, to such an extent that the division was in that respect in good condition for further action. In addition to this, the division commander knew the location of the various regiments, and it was thus easy for him to assign the separate bivouac sites. Yet a large number of men had not yet found their proper regiments or companies; whether they should still try to find them will depend on their degree of fatigue, their knowledge of where their troops are located, and the proximity of night; otherwise they should attach themselves to the nearest battalion and wait until morning. *In any case, it must be insisted that all the men work with their utmost ability toward the prompt restoration of order.*

The next care is to govern the ammunition supply. Regulations provide that company cartridge-wagons shall be under the charge of the battalion wagon-master (a non-commissioned officer on duty with the train) under the direction of the battalion commander. Cartridge-wagons are refilled either by sending them back to the ammunition columns or bringing up the latter.

Guns should be cleaned and inspected as soon as practicable; in the case in hand, this could hardly have been done that day.

Artillery has 9 ammunition-wagons to each battery, drawn up in two echelons, besides the ammunition carried in the caissons. Should this not suffice, then it should resort to the ammunition columns. It is therefore advisable that the first echelon of wagons approach the battle-field as near as possible,¹ and the leader of the second echelon inform himself as soon as possible of their station. If conditions demand it, filled wagons from the columns may be temporarily assigned directly to the batteries.

Finally, it is necessary to regain strength in order to restore our fighting capacity, and this is done by food, drink, and rest. Frequently the men will prefer to lie down and sleep, rather than go to work digging holes and fetching wood and water for cooking a substantial meal. Nevertheless a leader must insist that, in spite of all disinclination and difficulties, food be cooked whenever at all practicable. It is impossible to foresee what the next morning will bring forth, or whether there will be time enough left for proper refreshment before work is again demanded of the troops.

To accomplish all this, first of all, food must be on hand. On the battle-field requisitions generally furnish nothing, or at the best only an insufficient supply. In such cases troops are dependent upon the emergency ration. Of this each infantryman and artilleryman carries three days' supply, consisting of canned food, salt, coffee, and hardtack or bread. It is advisable to carry bacon on the subsistence-wagons, for it keeps well and can be eaten cold. Men are inclined to make

¹When batteries are on the march and are separated, it is not necessary that the wagons assigned to any one part should form in echelon.

premature use of what they carry in their haversacks, an infraction that only the strictest supervision and interposition on the part of leaders can prevent. Furthermore, hardtack is universally disliked; but although the subsistence-wagons can carry three days' complete rations for each man, including tea and bread, three days' supply of bread is almost too much for a man to carry on his back.

At all events, the one ration used on the 27th must be promptly replaced. For such purposes we have subsistence-wagons, and then the commissary columns, which follow the corps and are brought up as soon as possible, during the night if practicable. One such column suffices for one day's supply of an infantry division with corps artillery. If the subsistence-wagons arrive at the bivouac in good season, then the issue can be made from them direct; but if this is repeated for some time, care must be taken that the emergency ration is renewed.

Horse artillery carries two days' forage supply, and cavalry one day's. Additional supplies are carried in the forage-wagons of the supply column. Special attention must be given to the supply of oats.

Through an error, no permanent columns were assigned to the Second infantry division; 2 wagon trains and 1 supply column would have been sufficient.

The first duty of a chief quartermaster of a division during an engagement is to provide sufficient wagons filled with straw for carrying wounded, and to direct these to the dressing station. Furthermore, he has to see to the timely bringing up of the columns. Had columns been assigned to the division, they would have been obliged to remain at Schömberg until the result of the engagement appeared no longer uncertain, and they could not have been ordered up until then. The ground north of Sorge and to the west of the highway seems to be the most suitable place for them to establish a park after their arrival during the night. A chief quartermaster will request the general staff officer to inform him where the various bivouacs have been established, and then await the arrival of the trains.

If the trains come up in time to issue provisions during the evening, this should be done; if they arrive too late, the necessary supplies can be sent to the various bivouacs, or ev-

everything prepared during the night so an issue can be promptly made at daybreak. Beef cattle may be driven along as far as practicable, but should never be killed for immediate issue to troops. For actual consumption beef should be taken from the supply carried on the commissary wagons, if these are at hand. This meat is then at least a day old, and much more wholesome than if freshly killed. All empty wagons of the column should be immediately sent back to the nearest supply station, but in so doing will be utilized in the transportation of wounded in case enough wagons have not been requisitioned for that purpose. The chief quartermaster attends to this, and sees that sufficient straw is provided for bedding in the wagons. Finally, he must daily submit to the chief quartermaster of the corps an exact report as to how long he can subsist the division with the aid of the columns assigned to it.¹

Turning to the general question of bivouacking, we may say that a bivouac should only be established when the situation requires it. If practicable, we should always endeavor to put the men under cover, and they should be billeted in all available places in the immediate vicinity, or at least go into bivouac in a village. In this case the proximity of the enemy to a great extent prevented the seeking of such accommodations. Besides, fighting had taken place on all sides of Neu-Rognitz, and the village would very likely be filled with wounded incapable of being transported. Some of the farmhouses must furthermore be cleared for shelter for the staffs, as their clerical work had to be attended to. An occupation of Ober-Altenbuch and Alt-Rognitz could very properly be dispensed with; men quartered in the former place would be much exposed, and therefore require extensive measures of security, and troops put into the latter would be too far away and could not be brought up soon enough in case of a hostile attack. As for Hohenbruck, it was already within the territory of the First infantry division.

The distribution of bivouac sites in the case of the Second infantry division met all demands that could be made up-

¹In the German Army the subsistence of troops is performed by the Quartermaster's Department.—*Translator.*

on it. In the first place, it must be remembered that troops should lie behind the position to be occupied in case of hostile attack. Furthermore, here they were all on even, rising slopes, where the ground holds the least moisture. Meadows should be especially avoided as inimical to health. In addition to this, all of the bivouacs were protected against the wind by the ridges, woods, or villages surrounding them. Moreover, wood for cook-fires was easily obtainable. Protection against rain can be secured by shelter-tents, which can be erected in a short time.

In woods care must be taken to establish a boundary in rear of the bivouac (as a ravine, road, or fence), which should be guarded. Otherwise troops will scatter too much: some will even entirely leave the bivouac, and this has a bad influence upon the readiness of troops for action.

All other considerations must give way to readiness for action. In this direction some difficulty might be encountered with the water supply. Here the troops, being so closely assembled, were dependent on Neu-Rognitz and Burkersdorf alone for water, with possibly some help from Ober-Altenbuch and Sorge.

Where more freedom is allowed in the selection of bivouacs, it is well to consider the facilities for procuring water and for watering animals, and to have these facilities as near at hand as possible.

The more limited the ground available is, the more care must be taken to assign to each body its place precisely. We must also insist in bivouac that every body of troops in close order always take up its proper formation.

Under ordinary conditions, the size of the several bivouacs must be in accordance with Field Service Regulations.

In war we will often be forced to deviate from the prescribed order in establishing a bivouac. In this way, on account of the irregular formation of the ground, as seen in the case of the Second battalion of the Second regiment, a battalion may camp with some of its companies in a second line, instead of the companies alongside each other in platoon columns; for if it were desired to give the men the benefit of the shelter of the bushes at the edge of the woods, then the formations must conform to the character of the ground.

In such an event the places for roll-call and for the stacks will be outside of the timber, while the spots where the men should camp are designated within the woods.

Similar departure from regulations is necessary in the location of holes for fires and sinks, so they will not annoy either the troops themselves or adjoining bodies. It would hardly have been practicable to construct sinks in the bivouac of the Second infantry division; nevertheless places should be designated where men could attend to the calls of Nature. If troops are obliged to encamp one behind another, sinks must not be located between them, but placed on the flanks or in rear of the last subdivision.

In order that all these considerations may not be disregarded, a bivouac commander must be appointed. "The senior officer present is the commander of a bivouac." As the commander of the First infantry regiment was assigned to the command of a brigade, and as the other regimental commanders were either dead or wounded, Lieutenant-Colonel J——, of the First regiment of field artillery, was the senior officer in the bivouac. He must therefore camp at a spot easily recognizable (in this case close to the highway); and he must see that the place is made known to all guards; he must assign stables, wells, and watering-places, and is responsible for the measures of safety.

Let us now take a closer view of the bivouac southwest of Neu-Rognitz. It consisted of 4 companies each of the First and Second regiments, 3 squadrons, and 6 batteries. The first question was, Where shall the artillery be placed? Above all, it must have a clear field, in order to quickly occupy the position assigned it on Hill 635; but it should also be near a main road, so that it could respond promptly in case it should be needed farther to the front. For these reasons Lieutenant-Colonel J—— stationed it near the southwestern corner of Neu-Rognitz, close to the highway. There it was protected by the hill in front and by the near-by infantry, which had been specially located for that purpose in front of the artillery.

Upon the right the cavalry could rest quietly, as nothing need be feared from the direction of Ober-Altenbuch, and 2

sentry posts were in the vicinity. In case of an action, the hussars could find employment only on the right wing.

It was advisable to place companies of the Second battalion of the First regiment in the region between Hill 635 and the highway on the right wing, so that if the outposts should fall back behind the right wing of the main body, the First infantry regiment would be united. A sentry post was needed on Hill 635 to secure possession of this point on the right wing.

The First battalion of the Second regiment should unquestionably bivouac along the highway, to the east of which the two other battalions were camped.

In general the following may be said with regard to the arrangement of these bivouacs: If the wind came from the northeast, the fire-pits behind the various bivouacs should be located as far as practicable toward the west. Vehicles and any sutlers on the ground would be located between the infantry and the artillery, and sinks in the point of the woods west of Neu-Rognitz that projected southward.

The interior order in the bivouac was maintained by the color, standard, and park (artillery) guards. In order to give rest to the troops, these guards must be limited as much as practicable. For the same reason economy was exercised in the establishment of sentry posts, one on the right near Sorge, and two in front (one on Hill 635 and the other on the Burkersdorf highway).

But when all is said, the principal thing is to secure rest and comfort for the troops as soon as possible. Upon arriving, every body of troops must begin at once to establish itself, and when once engaged in this duty, every interruption amounts to a loss of rest, and can be justified only by the most urgent circumstances.

THE HOSPITAL SERVICE.

Let us here recapitulate the measures taken by the Medical Department up to this time.

As soon as the engagement was expected, the fact was communicated to the division surgeon, and directions of march were designated for the ambulance company and field hospital. At the same time (8:50 a. m.) the surgeon was in-

structed to requisition wagons for the transport of the wounded. For this purpose some cavalrymen were placed at his disposal.

Shortly before 11:30 a. m. the division commander was advised that a dressing station had been established in Kribnitz and that 21 requisitioned vehicles were on the spot. Up to that time it had not been necessary to employ the ambulance company, as the 4 litter-bearers regularly detailed by each company had been sufficient to carry wounded to the dressing station. This carrying of wounded was done under the supervision of specially detailed non-commissioned officers, who were placed under the regimental surgeons, together with 4 or 5 litters to each battalion taken from the two-horse medical wagons. These wagons, in accordance with regulations, had followed behind the battalions as light baggage, so that the necessary number of litters was promptly available. The medical wagon belonging to the Second battalion of the Second regiment remained at the dressing station, and the necessary medicines and appliances were taken from it. The surgeon of the Second regiment took charge of the medical service at the station, and had a Red Cross flag raised.

When near 1 o'clock the engagement assumed greater proportions, the division surgeon put the ambulance company to work and established a general dressing station at Kribnitz. To this point he also brought up the field hospital. All this was duly reported to the division commander at 1:45 p. m., who was further advised that the ambulance companies of the First infantry division had also arrived north of Hohenbruck. These dispositions met the approval of the division commander.¹ We might add that if the entire ambulance company of the First division had not been on hand, a section of the Second division could have been advantageously employed near Hohenbruck.

In this instance the division surgeon made disposition of the ambulance company of his own accord. He has the right to do so when no order is received from division headquarters and there is danger in delay; nevertheless, an order from

¹See pages 230 and 233, Part III., for further remarks on the medical service.

division headquarters might easily have been obtained. The one who ought to make the dispositions is, however, the commander of the troops; he should decide whether the company should be set to work, how much of the company, at what place, and whether the temporary stations should be continued or absorbed into the general dressing station. This is prescribed in Regulations. The highest commander alone is able to surmise with any degree of certainty where the fight will be more fierce; he knows where he will carry on a dilatory action for a time; he also knows where the assault will entail the greatest sacrifices. He can best understand whether for the time being it will be simply an initiatory action and the decision worked out somewhere else. All these points must be considered in the establishment of dressing stations and the distribution of the medical personnel.

On the right wing ample provision was made for the time being by the dressing station in Hohenbruck. The establishing of one at the northwestern farm-house of Alt-Rognitz does not seem to be a fortunate choice for a dressing station on the left wing, as the Fourth brigade would have to reach out almost to the church of St. Paul and St. John before it could enter the engagement. The division surgeon was not aware of this, and so he could not take it into account; but the division commander should have advised him in due season. In consequence of this neglect, the wounded on the extreme left were over a mile and a half away from the nearest station, which is too great a distance, especially when wounded must be carried.

The subsequent moving of the main dressing station from Kriblitz to Alt-Rognitz and merging the temporary station with it was eminently correct. Here it was not reached by infantry fire, had water near by, and need not pitch dressing-tents, as houses were available. The spot was marked by two flags—one the National color and the other the Red Cross flag.

To get the best service from the hospital corps; it is absolutely necessary for the commander to keep medical officers fully informed concerning the course of events. But before the beginning of an action a general survey is practicable only in exceptional cases, and it is recommended not to dispose too

quickly of all the resources of the medical service. At first we should get along with temporary dressing stations, and employ the regimental surgeons and medical wagons in them. It is true that the latter are hardly able to follow troops advancing over fields and frequently seeking cover; they are often left lying in a ditch, and as a rule, they lose connection with the body to which they belong. Whenever an action assumes a stationary character, it is well to permit one or more temporary dressing stations to be absorbed in a general dressing station.

But if losses are considerable at the outset, then the ambulance company must go to work for itself; even then, however, it is advisable first to employ only one section; and especially to allow only one of the hospital wagons to be unpacked. When a large stream of wounded is coming in, we certainly are desirous of helping them as soon as possible, and in such cases we are easily led to dispose of all the medical service at hand. But if this is done and the fight moves forward a few miles, or perhaps further, then the wounded are without help; for it is not easy to move a general dressing station to the front, when once established, especially if all the litter-bearers are already deployed on the field, where they may be so busy that they cannot attend to the wounded assigned them.

It might indeed be claimed that all the hospital corps can do is to keep incessantly at work, and that it cannot be employed in one place when it is elsewhere fully engaged. But this is not so. The requirements of wounded men differ materially. Of course every man who is hurt desires to get into the hands of a surgeon as soon as possible; in many cases, however, it makes little difference if this is deferred for an hour, while in some cases life depends on it. Consequently the first thing to be done when wounded arrive at a dressing station is to sort them out and first attend to such as require urgent assistance. But if there are hundreds of wounded possibly 2 miles from the main dressing station, where they cannot even be collected, and where there is no surgical assistance whatever available, help which would then be of service might be useless a few hours later.

This is probably the reason why Regulations provide for leaving half of the officers and non-commissioned officers of

the Medical Department with their organizations in action, and half at the dressing stations. And notwithstanding this provision, even if the medical officers on the fighting line be ever so self-sacrificing, their activity will nevertheless be limited, for the necessary assistance, quietude, material, and a proper place to work in will often be wanting. Furthermore, we must not overlook the fact that in the more important cases, those which demand the most prompt help, especially in operations, the lone surgeon can do nothing, but that he must have surgeon assistants.

The more co-operation provided for the finding and collecting of wounded and the greater the centralization of the surgical personnel, whereby one surgeon can come to the assistance of another, the greater blessing will the hospital corps be.

In this connection it is recommended not only to dispose of half of the surgeons with the troops, but also to send the personnel of field hospitals not yet erected to the dressing stations; indeed, this is expressly authorized in Field Regulations for the Medical Department (paragraph 56). Here also is it necessary for the field hospitals to be advised in good season, and *this can only be done when the directing medical officers (chief surgeons of divisions and corps) receive suitable instructions from superior troop leaders.*

The reason for retaining half of the regimental surgeons non-commissioned officers with their organizations and not using them at the dressing stations is probably that troops needing to make a further advance will not be without surgical attendance. In the field all surgeons are mounted, so they can follow anywhere without over-exertion. Non-commissioned officers of the hospital corps ought to be drilled in the use of the bicycle, so they may keep up prompt communication between the dressing stations, the troops, and the field hospitals.

As far as practicable, preliminary dressings are applied on the fighting line by surgeons, non-commissioned officers of the Medical Department, litter-bearers, and the troops themselves.

Besides the general dressing station established in Alt-Rognitz, a temporary station at Hohenbruck, in the rear of the

Ninth infantry brigade, was ordered; also a general dressing station north of that village.

We will now give especial consideration to the station at Alt-Rognitz. The ambulance company disposable there consisted of a mounted captain as commander, lieutenants, a quartermaster, an orderly sergeant, and over 100 litter-bearers; the surgical personnel at hand was a chief surgeon, several surgeons and assistant surgeons, a field apothecary, non-commissioned officers of the hospital corps, nurses, and the necessary men of the train. Besides the 2 medical and 2 baggage-wagons, 8 ambulances were there; each of the ambulances supplied with 6 to 9 litters.

When Lieutenant-General A—— first met the corps commander, the division surgeon requested the chief quartermaster of the corps to provide more wagons, as up to that moment only 21 requisitioned wagons were at hand. He informed him, however, that the mounted men who had gathered these wagons had been sent to Trautenau to see if they could not find more. The quartermaster made arrangements to have the necessary supply brought up out of the villages in the vicinity.

The division surgeon also availed himself of this opportunity to discuss matters with the chief surgeon of the corps, and to advise him of dispositions already made. The latter stated that he had ordered three more field hospitals to report at Trautenau, where he would establish them if necessary; and that he would hold the Third ambulance company at the disposal of corps headquarters in readiness for any employment that might devolve upon it.

After that, the division surgeon went to Hohenbruck, where he found the surgeon of the First regiment, who had already taken charge of the surgical work at the temporary station there. After consulting with him, he hurried on to Alt-Rognitz. There the ambulance company was already busily employed. The farm-house at the northwest corner of the village, with its two large granaries, was well adapted for the purpose. The building was situated in a well-sheltered position at the foot of the heights, several trees furnishing shade, and a deep cut at its side was running with spring water. To the west of the buildings was a suitable place for parking the medical and baggage-wagons. The Red Cross

flag was raised alongside the National color on one of the granaries, and was visible a great distance off. Some of the various regimental surgeons were already on the spot.

At that time the left wing of the Third brigade was hotly engaged on the ridge east of Peak 527, and the Fourth brigade had just left Alt-Rogwitz to attack. The officer in charge had sent 4 ambulances to the field on which the Third brigade was engaged, under charge of an officer, having equipped the litter-bearers with the necessary dressings and restoratives. The officer halted the ambulances in a depression behind the left wing of the brigade, and from there sent forward the several litter-bearers each to a definite point, which he distinctly pointed out to them. When he rode over the ground and noticed that the litter-bearers of another ambulance company (that of the First division) were already at work near Hohenbruck, he contented himself with sending men in that direction only into the thickets on Hill 527. To the north, however, beyond Hill 513, the litter-bearers found several men of the First and Second regiments who were severely wounded. These, as well as wounded found elsewhere, were first refreshed and provided with first aid, then lifted on the litters, and carried either to the general dressing station or to wagons, according to distance. When practicable, the wagons drove up to them. Whenever a wagon was filled (2 to 4 wounded), it was driven back to the station under supervision of a lance corporal; arms and equipments were picked up and carried along. These wagons were returned from the dressing station as quickly as possible, after they were again loaded with litters, and were sent to a station established on the fighting line.

Those who were slightly wounded were directed to this dressing station, while company litter-bearers soon caught sight of the wagons and brought wounded up to them. Although the dressing station soon became crowded with patients, it was still possible to examine and attend to them all.

When the wounded were brought up, they were taken out of the wagons by so-called receiving details, which consisted of surgeons and non-commissioned officers of the hospital corps. The senior surgeon present had divided his corps of assisting surgeons and their helpers into three parts. The duty of

the first was reception, bedding, refreshing, examining, and sorting. The second party applied the more difficult dressings requiring time. The third party performed such vital operations as could not have been performed at the temporary station.

The division surgeon soon came up, and he took charge. Whenever a body of slightly wounded gathered, he had them march to Trautenau, to report to the commanding officer at that place, with a view to their being sent to the nearest supply station. It was impossible to furnish an escort during the engagement; Regulations require such details to be made by division headquarters. Neither could the end of the fight be awaited, for above everything else it was important that the place be cleared as much as possible.

In like manner those who were severely wounded were sent to the field hospital in Kriblitz; those unable to walk being taken in requisitioned wagons.

When the action opened, the number of wagons on hand was quite sufficient; surgical assistance, too, could be promptly rendered; but as soon as the Fourth brigade became engaged, the situation changed. As we know, the attack of the left wing of this brigade miscarried in a very short time, and with heavy losses. As soon as the brigade deployed west of Alt-Rognitz, the commander of the ambulance company immediately sent the Second section and all available ambulances to that village, on account of the extent of the field of action. The officer in charge of this section divided his force into two parts, to each of which he assigned territory marked by the roads in front. In a few minutes, however, the stream of wounded went directly to the dressing station, and the services of the entire surgical personnel were taxed to a high degree.

According to Field Service Regulations for the Medical Department, the division surgeon must assume command at the main dressing station, which was done in this case. The senior surgeon has to do particularly with the work of the ambulance personnel. The corps surgeon, when acting as division surgeon, cannot remain permanently at one main station; he must superintend all, and not become absorbed in the work at one alone. In this case the division surgeon went at once to the left

wing to see personally what help might be given there. At that point he found the field completely covered with dead and wounded, regimental surgeons having been unable to accomplish anything in the general confusion. Accordingly he immediately sought out the ambulance company officer who was in the vicinity with his section; the latter could lead him to the surgeon of the Fourth regiment, with whom he had spoken shortly before this. Fortunately, they found the surgeon quickly. The division surgeon thereupon directed the regimental surgeon to go to the farm-yard in front of the church of St. Paul and St. John, and establish a temporary dressing station there, and instructed him to send thither any company surgeons he might meet. Moreover, he despatched a mounted non-commissioned officer of the hospital train to the chief surgeon of the corps, with the following written recommendation:

Heavy losses on the left wing make it absolutely necessary to use the Third ambulance company. Please send it as quickly as possible to the church of St. Paul and St. John, in Alt-Rognitz, where Major E——, surgeon, will establish a dressing station.

P——,

Chief Surgeon of Division.

The division surgeon then hastened back to the main dressing station, to send help from there to Major E——.

The establishing of the new dressing station was a most difficult task; except for location, which was rather convenient, there was nothing else at hand. The medical officer succeeded in finding two other surgeons, several non-commissioned officers of the hospital corps, and some assistant litter-bearers, whom he sent thither. The wounded too, when they perceived the direction taken by the bearers, also followed, and soon a large number of men in need of help were assembled. But everything in the way of supplies was wanting; even the medical wagons could not be found. There was not a single mounted man at hand to look for them. Finally, after more than half an hour had elapsed, the division surgeon arrived with 3 medical officers, 3 non-commissioned officers of the hospital corps, and 1 medical wagon; these had turned over the wounded they had in charge to their colleagues at the main station.

Even the wagons that had been requisitioned by the corps quartermaster did not arrive, as they had been appropriated by the main dressing station when they had arrived at the northwestern entrance of the village. No attempt was therefore made to send to the rear during the day men from the newly established station; it was preferred to shelter the men in the nearest farm-buildings, in which work the slightly wounded were required to assist.

An hour and a half of anxiety passed, and finally the Third ambulance company arrived, and order was partially established. After this much had been accomplished, the division surgeon thought he ought to see how matters stood on the right wing, where in the meantime a successful action had been in progress, and also to see how the wounded were being cared for there. On the right wing he found a tent erected near the last house (which had been battered down) at the northern extremity of Neu-Rognitz, and to his delight observed that a section of the ambulance company of the First infantry division had gone forward to that point; the section had certainly all it could do. From there he wrote the following report to division headquarters:

The First ambulance company is posted north of Hohenbruck and in Neu-Rognitz, the Second at the northern extremity of Alt-Rognitz, and the Third in the center of the village near the church. The Third ambulance company is wholly without wagons for carrying wounded. The number of wounded cannot yet be determined, but it will exceed 1,000. During the night I will remain with the Third ambulance company.

P——,

Chief Surgeon of Division.

The work of the division surgeon and the other medical officers continued without cessation during the entire night, and yet little could be done for the enemy's wounded, which remained on the field. Fortunately, the opponent had left some surgeons for them in Neu-Rognitz and Burkersdorf when he retreated. At the latter place these were assisted by two surgeons who had kept up with the First regiment. The litter-bearers were kept busy for several hours during the night searching for wounded.

Great difficulty was encountered when it came to transporting the severely wounded to the nearest field hospital. For instance, 400 wounded had to be sent from the main dressing station at the northwestern extremity of Alt-Rognitz to Kriblitz and Trautenau. The 21 wagons on hand could carry only 4 men each, a total of 84 men for one trip; an average of 2 hours was required for each trip, going and returning. The first transport started out at about 3 o'clock. By 7 p. m., therefore, only 168 men could be sent to the field hospitals, and 232 wounded would be obliged to remain out of doors without sufficient attention. It was therefore a great help when many more wagons, in the aggregate about 50, were requisitioned by supreme effort, and the main dressing station was thus cleared of severely wounded before darkness set in. When practicable, the wagons were fitted up with boards and ropes in such a way that the beds of the patients swung back and forth, whereby the jolting was not severely felt.

This, in brief, outlines the work of the Medical Department on the battle-field on the 27th of June.

THE GENERAL STAFF OFFICER.

While the division commander was away on his trip to the outposts, the general staff officer, in Neu-Rognitz, debated whether anything further could be attended to. The necessary arrangements for ammunition and subsistence had been made. In view of the great distance from the commissary wagons and the baggage, nothing could be done but to order the use of the emergency ration. If the commissary wagons should actually arrive at midnight, all they could do was to renew the emergency ration consumed. What was further required to satisfy immediate wants of subsistence and forage ever officer had received authority to requisition for his own command, giving receipts therefor. In the field the arrival of subsistence can never be definitely counted on. The men's strength must be restored. It is better, however, that the chief quartermaster of the division should authorize requisitions. The chief quartermaster had indeed consulted the general staff officer (Major X——) about this, but immediately thereafter went away. The major was also aware that pris-

oners and captured horses should be sent to Trautenau, and that wounded men had been directed to go to Trautenau and Kriblitz. No orders had been issued relative to bringing up the heavy baggage; indeed, this is a matter that is frequently overlooked. During one of the long periods of the general staff officer's absence, however, Lieutenant-General A—— had, in good season, sent back an order directing the baggage to follow as far as Parschnitz, as soon as the Guard had passed through the mountain defiles; also at the close of the engagement he had sent orders for it to advance to Neu-Rognitz, via Trautenau. However, when darkness set in, the wagons were not on hand, and the general staff officer felt obliged to send an orderly to meet the heavy baggage, with directions that it should park before Neu-Rognitz, west of the highway, as it could hardly find the various bodies of troops in the darkness and might cause disturbance.

As already stated, for the night officers and men derived no benefit from the heavy baggage; at any rate, it would be on hand the next morning. The timely ordering up of baggage is often forgotten in war and in peace, or at least attended to rather late. Troops judge the general staff officer in part by his work in this direction, as it so materially affects their condition, and it is recommended rather to do too much than too little as regards the baggage. A general staff officer will do well to have one of his assistants remind him of this measure during an engagement.

After debating on these points, Major X—— turned to the preparation of the report on the day's events, which he just finished as his general returned (8:45 p. m.). After the major stated what he had done with regard to the train and what measures the chief quartermaster had adopted for subsistence, and the general had signified his approval of these steps, he read the following draft:

*Report of the Second Infantry Division on the Engagement
Near Neu-Rognitz, June 27, 1866.*

At 4 a. m., June 27, the division, accompanied by the First cavalry brigade, broke bivouac near Bertelsdorf and Schömberg, and took up the march upon Trautenau (Exhibit A; division order).

At 6:30 a. m. the point reached the exit of the mountain defile near Parschnitz. All that had been seen of the enemy up to that time were isolated bodies of dragoons. Pursuant to orders from corps headquarters, a halt was made at Parschnitz. The First infantry division had not yet arrived, though communication had been maintained with it by patrols (Exhibits B and C; messages). For security during the halt, Colonel D—— occupied the defile on the Liebau road, nearly three-quarters of a mile north of Trautenau, with 7 companies of infantry, 2 batteries, and 1 squadron, while Major-General B—— crossed the Aupa and took up a position on the heights on the right bank with 4 battalions of the Third brigade, 1 battery, 2½ squadrons, and the engineer company. A company of infantry and a platoon of hussars were detached in the Aupa valley toward Raussnitz.

At 8:30 a. m. a message was received from the left flank detachment (Exhibit D), stating that a strong hostile column of all arms was marching upon Trautenau, and that its point was not far from Hohenbruck.

Although the First infantry division had not yet arrived, it seemed necessary, under the circumstances, to take possession of Trautenau before the enemy could firmly establish himself there. An advance upon the right bank of the Aupa against the flank and line of retreat of the enemy promised to lead most quickly to the objective, and the main body of the division was therefore directed to cross the Aupa near Parschnitz and advance to the left of the parts of the Third brigade which were already there.

At 9 a. m. a hostile battery opened fire from the Hopfen Mountain; this fire was immediately returned by three of our own batteries. In consequence of the turning movement which threatened his right wing, the enemy was forced to abandon his position on the heights south of Trautenau, and to hurriedly fall back upon Neu-Rognitz. The Second battalion of the First regiment of infantry became involved in a lively skirmish with hostile infantry at the Kriblitz ravine.

The enemy, whose strength was at first estimated at about 1 infantry brigade, 4 batteries, and 4 squadrons, all of the Tenth army corps, thereupon occupied the woods north

of Neu-Rognitz, where he prepared for defense. As a continuation of the action would, however, have deflected the army corps from its intended march upon Arnau, the division was again temporarily assembled, on the heights between Hohenbruck and Alt-Rognitz, and the action meanwhile continued by artillery (Exhibit E: division order).

At 11:30 a. m. his excellency the corps commander arrived upon the heights south of Trautenau, and as the First infantry division at that time was in the act of approaching the town, he ordered a continuation of the attack. The plan of attack was to firmly hold the highway against the enemy's front and at the same time turn his right flank.

For this purpose the Third brigade was verbally directed to deploy for an attack against the hostile front near Hohenbruck and east of the highway. The Fourth brigade was instructed to advance in the direction of the church of St. Paul and St. John, its left wing covered by Alt-Rognitz, and followed by the hussar regiment to turn toward the opponent's flank. The First regiment of artillery was ordered to support the attack from Ridge 500 (northwest of Alt-Rognitz), and the horse battery to remain in action on the Galgen Mountain until the arrival of the Sixteenth field artillery regiment, which had been asked for.

In view of the threatened flank movement, the enemy, who had evidently been reinforced, now also occupied the woods south of the wagon-road, between Alt-Rognitz and Neu-Rognitz, and pushed skirmishers forward into the the depressions and low meadows in front of his position.

As soon as the Fourth brigade had completed its march, Major-General B—— advanced to the attack with the Third brigade from Hohenbruck and the region east of it. This movement involved the First regiment (which was on the right wing) in a prolonged, bloody fight, in which a hostile counter-attack was only successfully repulsed by the First cavalry brigade and the horse battery.

Shortly after 1 p. m. the hostile artillery, which had taken position with 1 battery to the west and 3 or 4 to the east of the main road, was subdued by our artillery, the Sixteenth field artillery regiment having joined in the fire from the Galgen Mountain.

About the same time the Fourth brigade had begun its attack from Alt-Rognitz, thereby effecting a united attack by the division.

While the Third brigade was successful in penetrating the strongly occupied thickets northeast of Neu-Rognitz and even gaining ground there and in the village itself, the attack of the 2 battalions of the Third regiment on the left wing of the Fourth brigade miscarried. These troops were met with a cross-fire from the village and the thickets to its south, while fresh hostile forces appeared on their flank and the enemy's artillery again took part. In spite of its heroic effort to advance, the left wing of the brigade fell back with heavy losses. Major-General C—— and Colonel F—— were wounded in that action. Hostile cavalry threatened to attack the retreating forces, but their attempt was abandoned when the hussar regiment hurried up.

The right wing of the brigade in the meantime resolutely continued the attack, and supported the overthrown battalions so efficiently that they were able to take part in the attack anew.

I went to the left wing in person and restored order. Major Z—— took provisional command of the brigade, as Colonel G—— had been killed.

While the Third brigade was gradually gaining complete possession of Neu-Rognitz and the woods west of it, the entire Fourth brigade, including its left wing, undertook a fresh attack on the woods at the wagon-road, from which they succeeded in driving the opponent. Strong hostile reserves, however, still held the chain of woods southeast of Neu-Rognitz, also the heights toward Burkersdorf on both sides of the highway. An attack upon this position was deferred for the time being, as meanwhile a message had been received (Exhibit F), stating that the First infantry division of the Guard was advancing via Rudersdorf and Staudenz.

Under pressure of their advance, about 4 p. m. the enemy evacuated his last position, and under cover of strong masses of artillery and cavalry withdrew upon Deutsch-Praussnitz and Kaile, which villages his rear guard held for some time. A battalion of the First regiment advanced to Burkersdorf and occupied that village, while the artillery kept up a

fire on the retreating forces from the heights north of Burkersdorf. Under the protection of the hussar regiment, which had been led south of Burkersdorf, outposts were established on the line Ober-Altenbuch-Burkersdorf-Staudenz.

The main body went into bivouac around Neu-Rognitz.

The losses cannot yet be ascertained, but certainly exceed 2,000 men. Unfortunately, in addition to the above-mentioned officers, Colonel E——, commander of the Second infantry regiment, is severely wounded. The losses on the side of the enemy appear to be considerable; several hundred prisoners (not wounded) are in our hands. The opponent seems to consist of the Tenth army corps and a cavalry division.

Lieutenant-General A—— gave his approval to this draft. As the clerks had not yet arrived, it was handed to one of the aids to be copied.

The division surgeon's report, which had been made in pursuance of Field Service Regulations for the Medical Department, had in the meantime arrived (this report has already been given), and gave assurance that everything possible had been done in that direction.

As the promised orders from corps headquarters were yet to come in during the night and would probably call the entire staff to perform some new duties, shortly after 10 o'clock the general dismissed his officers, who at once sought out resting-places.

COMMENTS ON THE DIVISION REPORT.

We have quoted the division report *verbatim*. As far as practicable, such reports must be prepared by every body of troops on the same day in which the action occurs. They furnish not only the materials for the later historical account, but are the source of all experiences which, gained through heavy sacrifices, serve to regulate the tactical training of troops in time of peace. They are also needed in substantiating claims for distinction and rewards, as well as for other purposes of research, and especially for refuting accusations or clearing up various questions in dispute.

Reports written immediately after the occurrence of events bear the surest stamp of truth, forming a permanent framework for such detailed narratives as may be called for later. When these reports are put off, memory will step in and play some most remarkable tricks, so that even the most honest intention to describe only what actually took place will be entangled with rare pictures that our own fancy has built up. After the battle-field has been left, human imagination measures time and space with entirely different standards than when the battle has just ended; minutes of restless waiting under a hot fire are remembered as hours, while a long period of uninterrupted activity and excitement seems only a brief moment.

The main points to be sought in such reports are correctness, brevity, and explicitness. It is advisable to state only what one has seen in person or learned through members of his staff. Unsuccessful phases of the fight must not be omitted, but acknowledged openly, as was done in this case with the attack of the 2 battalions of the Third regiment of infantry. Silence on such points is useless, for they are sure to be rumored, and this will most certainly call into question the truthfulness of the one who makes the report. Care should be taken that exact statements of losses are not given out immediately after an engagement; only guesses can be made on these points, as well as on the intentions and strength of the enemy. The statement of the exact time is also an important item, although time can generally be correctly recorded only in the higher staffs, where an officer may be specially charged with such a duty; when with troops we do well if we can pull out a watch as the first cannon-shot is fired or as the engagement comes to an end.

It is equally advisable to quote word for word all orders received or given when they are of especial importance, else many differences of opinion may arise in the course of events which it will be no easy task to clear up.

Often, too, troops are praised after the most exalted fashion. For instance, it will be stated, "The regiment stormed the position with unprecedented bravery," while afterwards it will be seen that only 10 or 20 men were lost in driving off the enemy, or that the position had been actually occupied only by

a few hostile companies. History is bound to bring real facts to light, to the dissolution of all halos of glory received in this manner. History does not need these voluntary exaggerations; its business is to explain things, and the expert will be far more impressed by a simple statement of facts than by grand words of commendation.

The same care that is needed in the preparation of reports should also be exercised in keeping diaries. Here too we insist that entries be actually made daily, for if we wait to do this on days of leisure, queer errors are apt to creep in. We remember once having looked through an old diary in which the thirty-first day of June came in for special remark. There are no rules that can be given for keeping diaries. But it is certain that if all the entries they contain dwell on the conditions of quarters or quote the names of sore-back horses, such records will be useless.

Exact data collected later showed that the loss sustained by the division was as follows:

Dead..	20 officers,	285 men,	57 horses.
Wounded..	81 officers,	1,771 men,	59 horses.
Missing..	officers,	91 men,	19 horses.

Total.. . . .	101 officers,	2,147 men,	135 horses.
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The heaviest sufferer was the Third regiment of infantry, having lost 37 officers and 873 men; which goes to show that the following lesson taught by Drill Regulations was well learned: "The soldier must press steadily on in the advance, and not halt without orders, be the losses ever so great and the fire ever so destructive, for retreat leads to annihilation."

COURSE OF EVENTS WITH THE ENEMY.

In conclusion, it may be of interest to learn something about the enemy as facts became known later through published reports and historical accounts.

According to these, on June 26 the Tenth corps with 1 brigade of the First reserve cavalry division, all belonging to the southern army, were in scattered quarters around Königshof, chiefly on the right bank of the Elbe. The First bri-

gade, consisting of 8 battalions, 3 squadrons, and 3 batteries, had been pushed forward to Deutsch-Praussnitz. In addition to these, the Second dragoon regiment watched the frontier near Trautenau.

When the presence of the First corps of the Prussian army near Schömberg and Liebau became known at headquarters, the Tenth army corps received orders to advance early on June 27 to Trautenau, and oppose the crossing of the frontier by the enemy.

In pursuance of this, soon after 8 o'clock the First brigade arrived near Trautenau, but found the enemy's point already near Parschnitz. The considerable superiority of the latter permitted him to cross the Aupa there and turn against the brigade's flank. In order not to enter into an action alone, it withdrew in time from the threatened turning movement, and went back into the position of Neu-Rognitz. Here the First battalion of riflemen occupied the woods west of the highway, and the First regiment held the woods along the highway and also the little woods northeast of the village. The Second battalion of riflemen remained behind it in reserve. One battalion of the Second regiment was sent into the thickets at the wagon-road leading to Alt-Rognitz, to cover the right flank, the two other battalions remaining at the southern exit of Neu-Rognitz as reserve and at the disposition of the brigade commander. At the latter point the Third squadron of the uhlan regiment was also posted. The regiment of dragoons examined the country toward Rudersdorf and Eypel. The batteries went into position east of Neu-Rognitz, being later reinforced by a horse battery which came up with the cavalry brigade and took position near Sorge.

The Prussian army gave the brigade ample time to establish itself in its position. The attack did not commence until 1 p. m., and was first directed against the front.

When, however, the turning movement by the Prussians' left wing was later discovered, the brigade commander reinforced the battalion of the Second regiment in the thickets near the wagon-road with another battalion of the regiment. The last battalion of the reserve was directed by the division commander (who had arrived in the meantime) to occupy

Neu-Rognitz, as the Second brigade was approaching the battle-field on its way from Königinhof. The Second battalion of riflemen was brought up to the advanced line.

At the same time reports were received from the dragoons that new strong columns of the enemy were advancing from the north upon Rudersdorf, and an order was sent to the Second brigade to send 1 regiment, with 1 battery, to the heights of the old quarry, for the support of the extreme right wing, but to leave the other regiment, with the Third battalion of riflemen, continue their march to Neu-Rognitz.

In the meantime Prussians had considerably reinforced their artillery, and compelled the 3 batteries east of Neu-Rognitz to withdraw. Soon afterwards the infantry attack followed along the whole line. On the right wing it was victoriously repulsed, where the uhlan regiment was participating. On the other hand, the opponent succeeded in penetrating the woods north and northeast of Neu-Rognitz, and shortly afterwards entered the village itself, while a counter-attack started by the First and Second battalions of riflemen and a battalion of the First regiment had been repulsed.

The commanding general was now forced to consider whether he had best attempt to restore the action by putting in his reserves; the moment appeared propitious for this.

Various reports of the approach of new hostile masses, however, convinced him that a momentary success could only make the general situation still worse. He already knew that he had been opposed by one entire division, and the columns of another advancing via Hohenbruck west of the highway could be distinctly seen. The presence of such strong hostile artillery, which was finally joined by new batteries from the direction of Trautenau, led to the conclusion that the entire Prussian First army corps was assembling.

But, in addition to this, reports had come in of the advance of new masses via Rudersdorf, while it was simultaneously learned that columns were approaching from the east in the Eypel defile.

Against these forces, which were estimated at two army corps, only 15 battalions were disposable; the 2 brigades of the corps and the corps artillery were only coming up to Deutsch-Praussnitz, their start having been delayed on account

of the great distances between the various quarters in which they had been sheltered upon the right bank of the Elbe.

It therefore seemed best to break off the action while yet possible, in order to avoid a threatened turning of the flank, and to unite the entire corps for the present in a position south of Deutsch-Praussnitz-Kaile, where it could cover the roads leading to the Elbe and could expect reinforcements the following day.

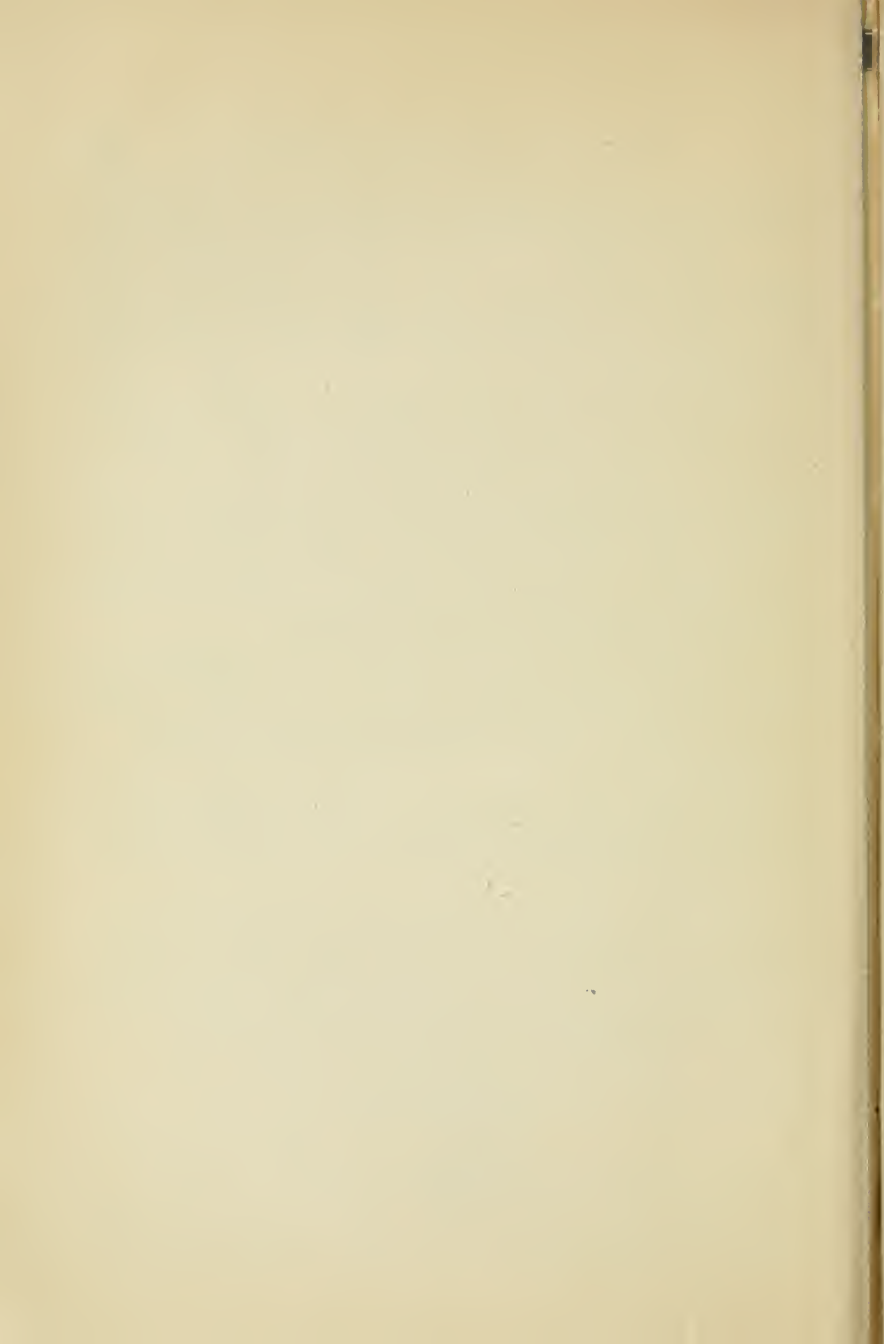
Under the protection of the artillery, increased to 6 batteries, which went into action southwest of Neu-Rognitz, as well as the 3 battalions of the Second brigade, which now occupied the heights of Burkersdorf, the troops of the First brigade were successfully withdrawn from the action and put in march upon Deutsch-Praussnitz. The right flank was secured by the 3 remaining battalions of the Second brigade and 1 battery, who had yet to continue a slight engagement with bodies of the Guard north of Staudenz.

The Second brigade was supported in the plain by the cavalry united there, consisting of the First brigade of the First reserve cavalry division, 3 squadrons of uhlans, 4 squadrons of dragoons (in all, 19 squadrons), and 6 batteries.

Large forces of the enemy pursued only as far as Burkersdorf.

The losses were 1,670 men dead and wounded and 650 prisoners. A considerable number of the wounded fell into the hands of the enemy.

It is seen from this account that the Second infantry division was engaged, in the main, against only 8 battalions, 7 squadrons, and 4 batteries, reinforced at the last moment by 7 battalions, 12 squadrons, and 3 batteries, and that in the course of the engagement its losses were very heavy.



GLOSSARY FOR USE WITH MAPS.

- Abth. (Abtheilung). *Battalion of artillery.*
alter Steinbruch. *Old quarry.*
Avantgarde. *Advance guard.*
A. W. *Sentry guard.*
B. (Berg). *Mountain.*
bei. *To.*
C. V. C. *Company as outpost support.*
Capelle. *Chapel.*
D. B. (Br.) T. (Tr.). *Division bridge train.*
D. T. (Tel.) A. (Abth.). *Signal corps detachment.*
Die Höhen sind in preuss. Decimal Fussen 25 dec.=9.4 m. *The heights are in Prussian decimal feet (25 ft.=9.4 meters).*
diesseitiger Truppen. *Prussian forces.*
Entsendet. *Detached.*
Esc. Escdr. Escadron. *Squadron.*
F. L. (Laz.). *Field hospital.*
F. W. *Picket.*
Fahrweg. *Wagon-road.*
Feld Art. *Field artillery.*
gegen. *Toward.*
geschlossene Abtheilungen. *Troops in close order.*
Grenze. *Boundary.*
Hainwiese. *Wooded meadow.*
Jäger. *Riflemen.*
Kirche St. Pauli und Johann. *Church of St. Paul and St. John.*
Kirchhöfe. *Churchyard.*
Komm. General. *Corps commander.*
Marschkolonne. *Columns of march.*
n. (nach). *To.*
nördl. Fussweg. *Northern foot-path.*

ohne. *Less.*

P. (Pi.) C. *Engineer company.*

Rechte Seit. Deckung. *Right flank cover.*

reit. (reitende) Battr. *Horse battery.*

Rothe Sandflur. *Red sand-bed.*

S. U. P. *Detached Non-commissioned officer's post.*

San. Det. *Ambulance company.*

Schäferei. *Sheep-fold.*

Schlucht. *Ravine.*

Schützenlinien. *Skirmish lines.*

sichtbare Aufstellung des Feindes. *Perceptible position of the enemy.*

Spitze des Gros. *Head of the main body.*

Steinbruch. *Quarry.*

südl. Fussweg. *Southern foot-path.*

u. *And.*

U. P. *Non-commissioned officer's post.*

Ueber. *Via.*

V. Gr. *Outpost reserve.*

von. *From.*

Vorp. Cav. in Ställen. *Outpost cavalry in stables.*

Wäldchen. *Little woods.*

Z. (Zg.) (Zug) Hus. *Hussar troop.*

Z. S. D. *Ambulance company section.*

ORGANIZATION

OF THE

D. INFANTRY DIVISION AND 1ST CAVALRY BRIGADE.

Commander: Lieutenant General A.

General Staff Officer: Major X.

4th Infantry Brigade.

Major General C.

3d Inf. Regt. Col. F.

3d Bn. 2d Bn. 1st Bn.

4th Inf. Regt. Col. G.

Bn. 2d Bn. 1st Bn.

3d Infantry Brigade.

Major General B.

1st Inf. Regt. Col. D.

3d Bn. 2d Bn. 1st Bn.

2d Inf. Regt. Col. E.

3d Bn. 2d B. 1st Bn.

1st Hussar Regt.

Lieut. Col. H.

**1st Field Artillery Regt.**

Lieut. Col. J.

2d Bn.

1st Bn.

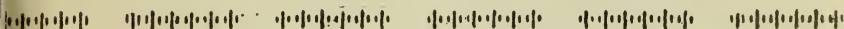
6

5

4

3

2

**1st Co. 1st Bn. Engineers (with Division Bridge Train).**

1



Sig. Corps Det.



Ambulance Co.

**1st Cavalry Brigade**

Major General L.

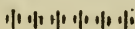
1st Uhlans, Col. N.

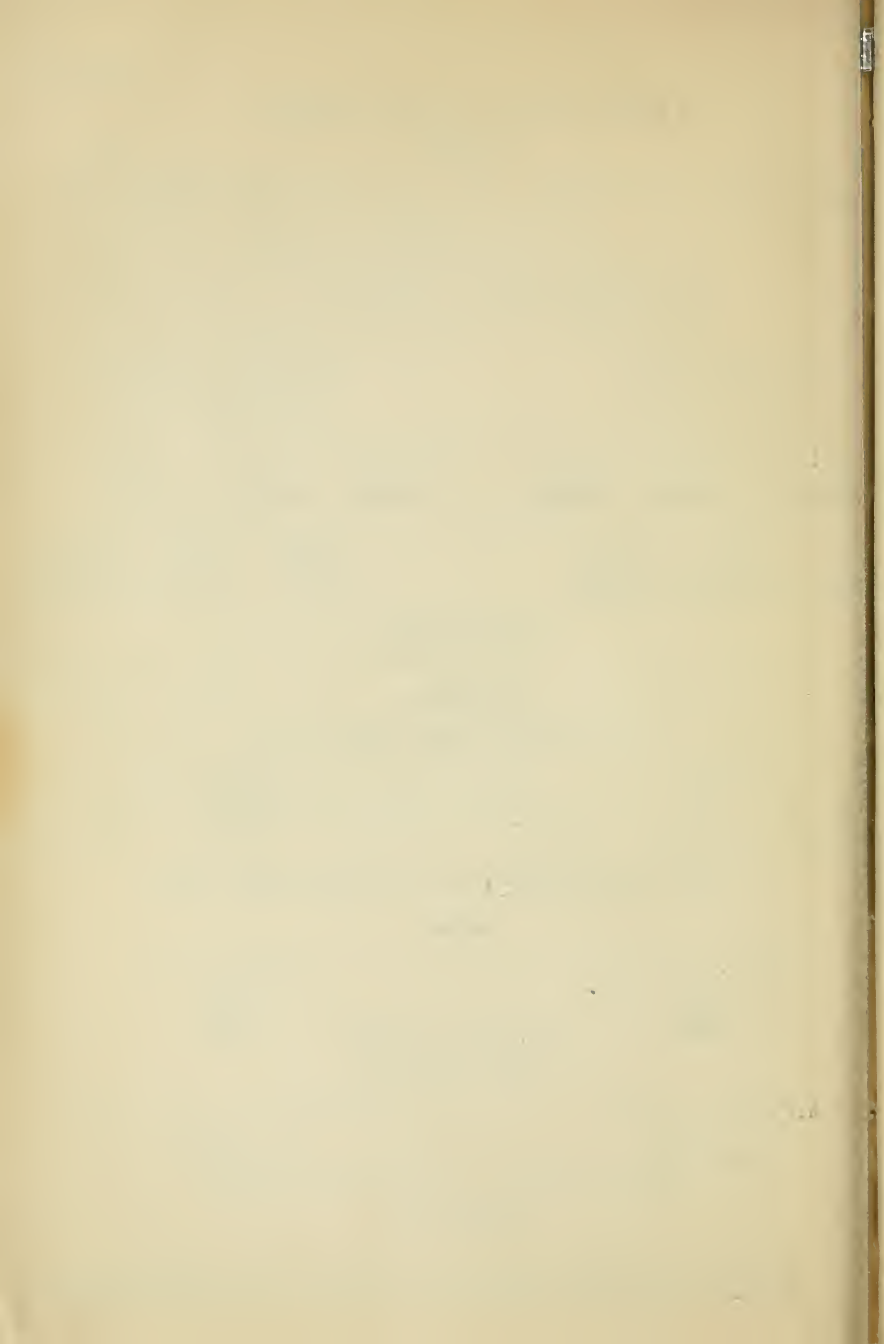


1st Cuirassiers, Lieut. Col. M.



1st Horse Battery, 1st Field Artillery Regt.

*Detached:* 2d Uhlans Regiment to 1st Infantry Division.*Temporarily Attached to 2d Infantry Division:* 2d Field Hospital.



LAGE

1874



Map. I. Camp of Second Infantry Division on June 26.

Z. u. v. Verdý - v. Gossler, Truppenführung I, 1.

Anlage 1.



Parschnitz

den 27^{ten} Juni 8 Uhr 40 Min. früh.



Map. I. Camp of Second Infantry Division on June 26.

Z. u. v. Verdy-v. Gossler, Truppenführung. I, 1.

Anlage 1.



FORMATION der 2^{ten} Infanterie Division, um 9 Uhr 50 Min. Vormittags.

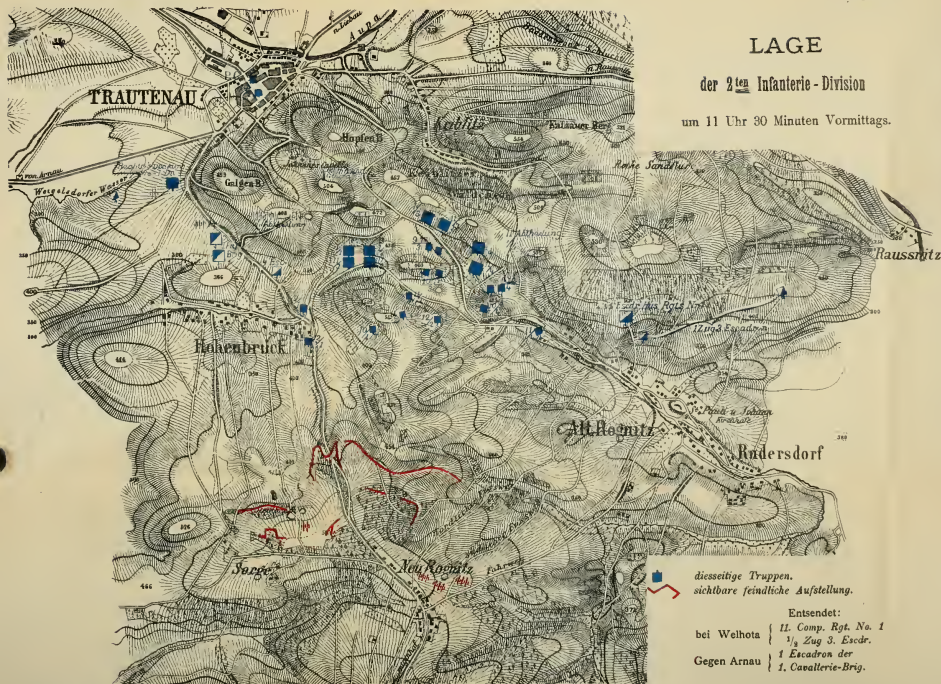


Zu: v. Verdy-v. Gossler, Studien I. 3.

LAGE

der 2^{ten} Infanterie-Division

um 11 Uhr 30 Minuten Vormittags.

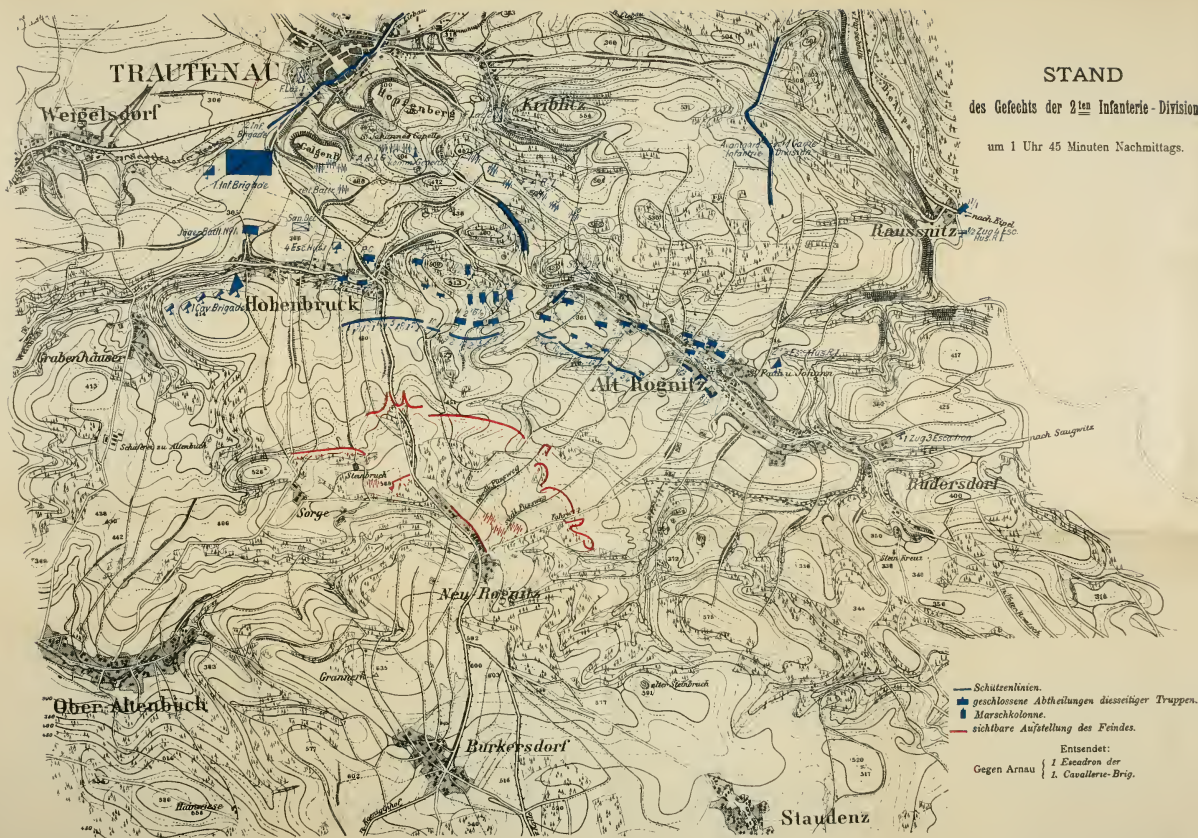


STAND

des Gefechts der 2^{ten} Infanterie-Division

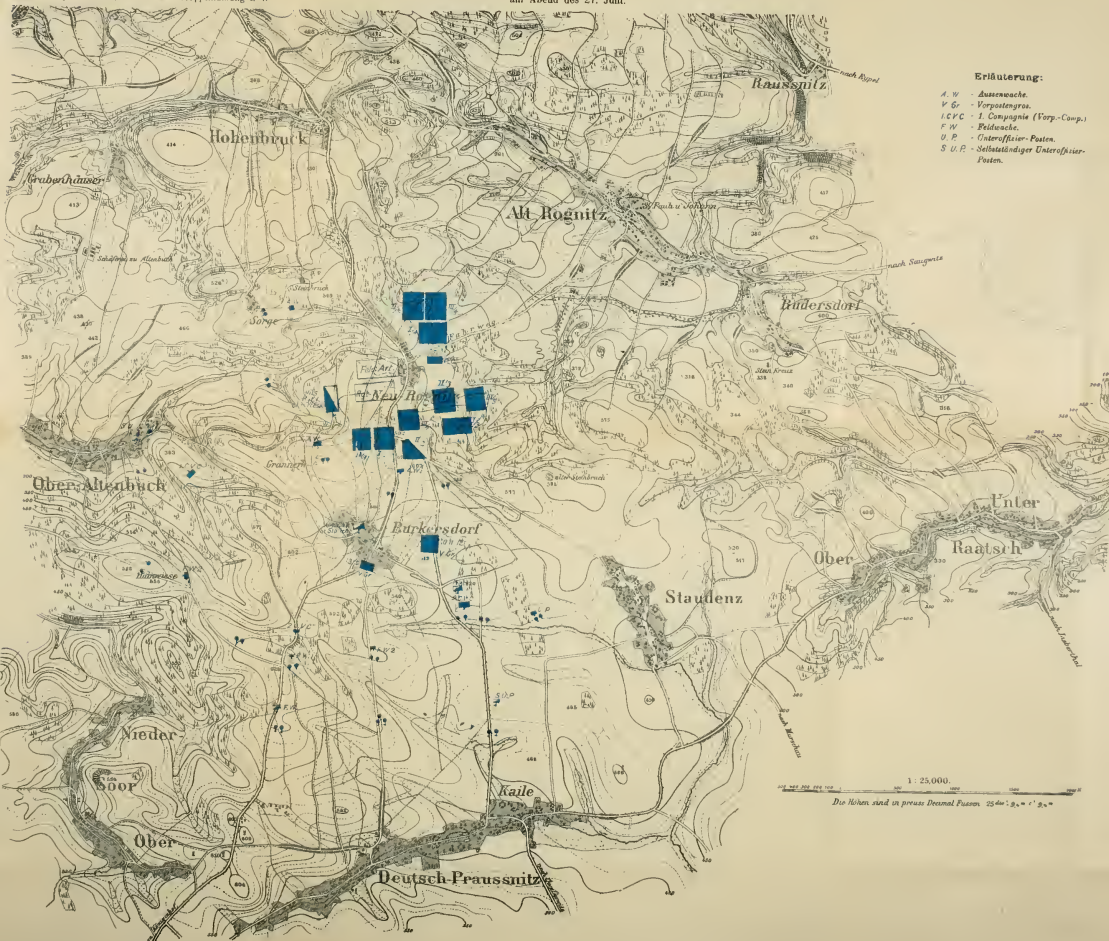
um 12 Uhr 45 Minuten Nachmittags.



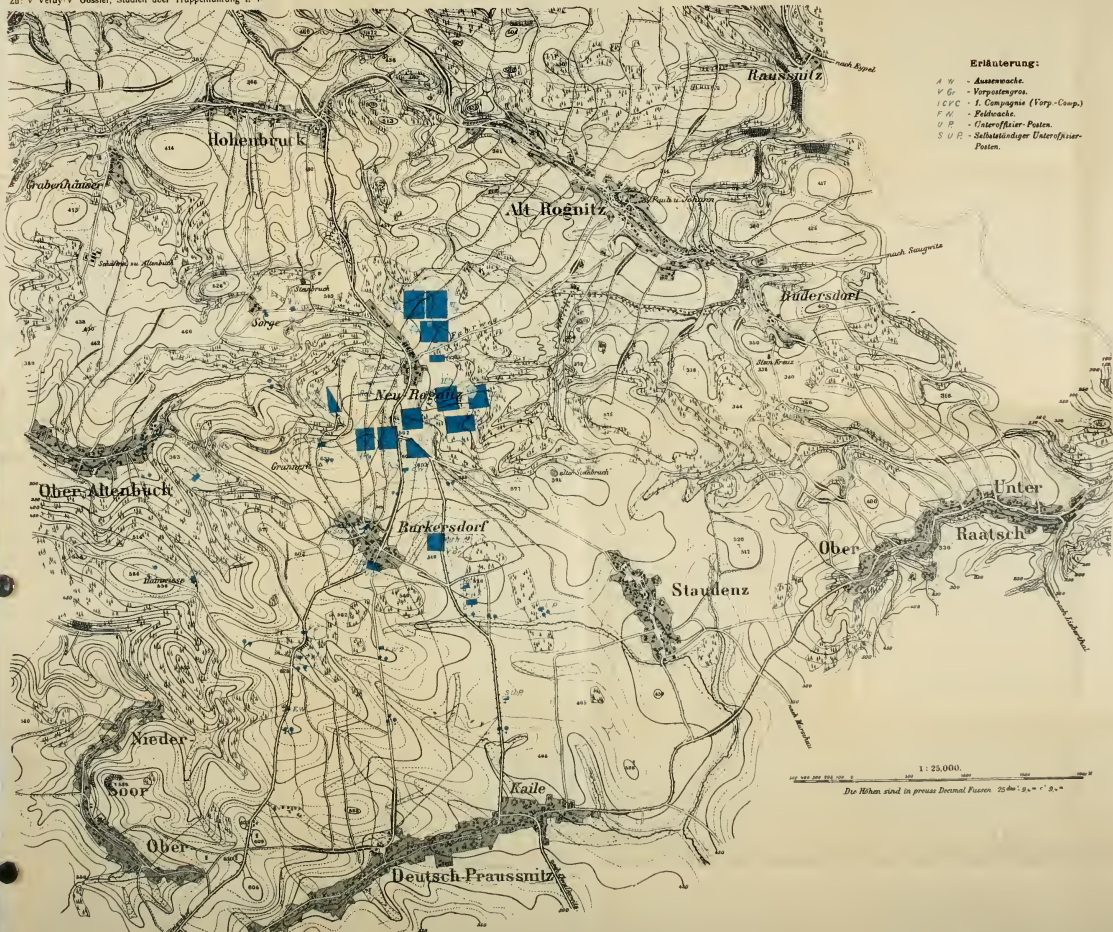


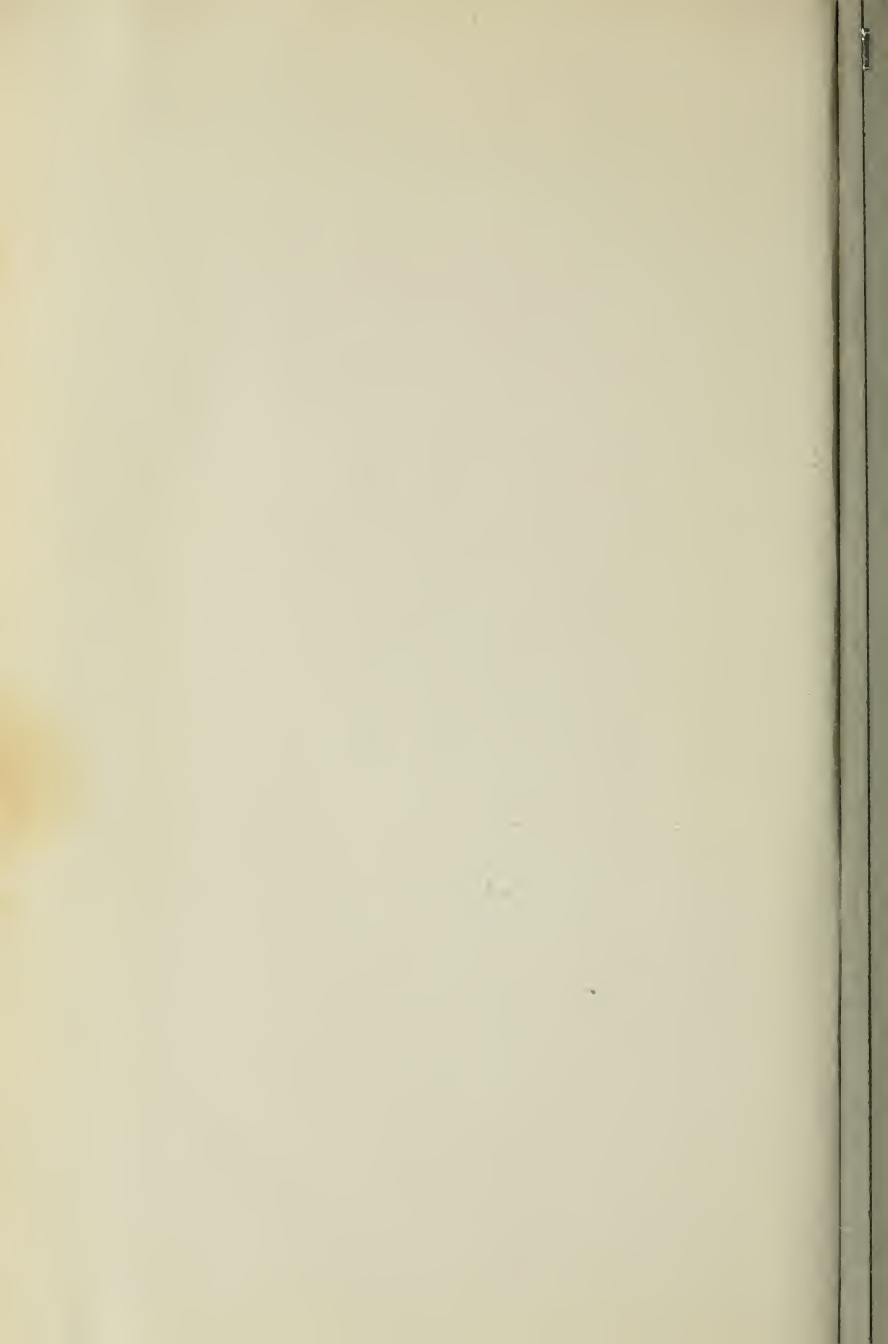
Biwaks and Vorposten-Aufstellung der 2^{ten} Infanterie-Division am Abend des 27. Juni.

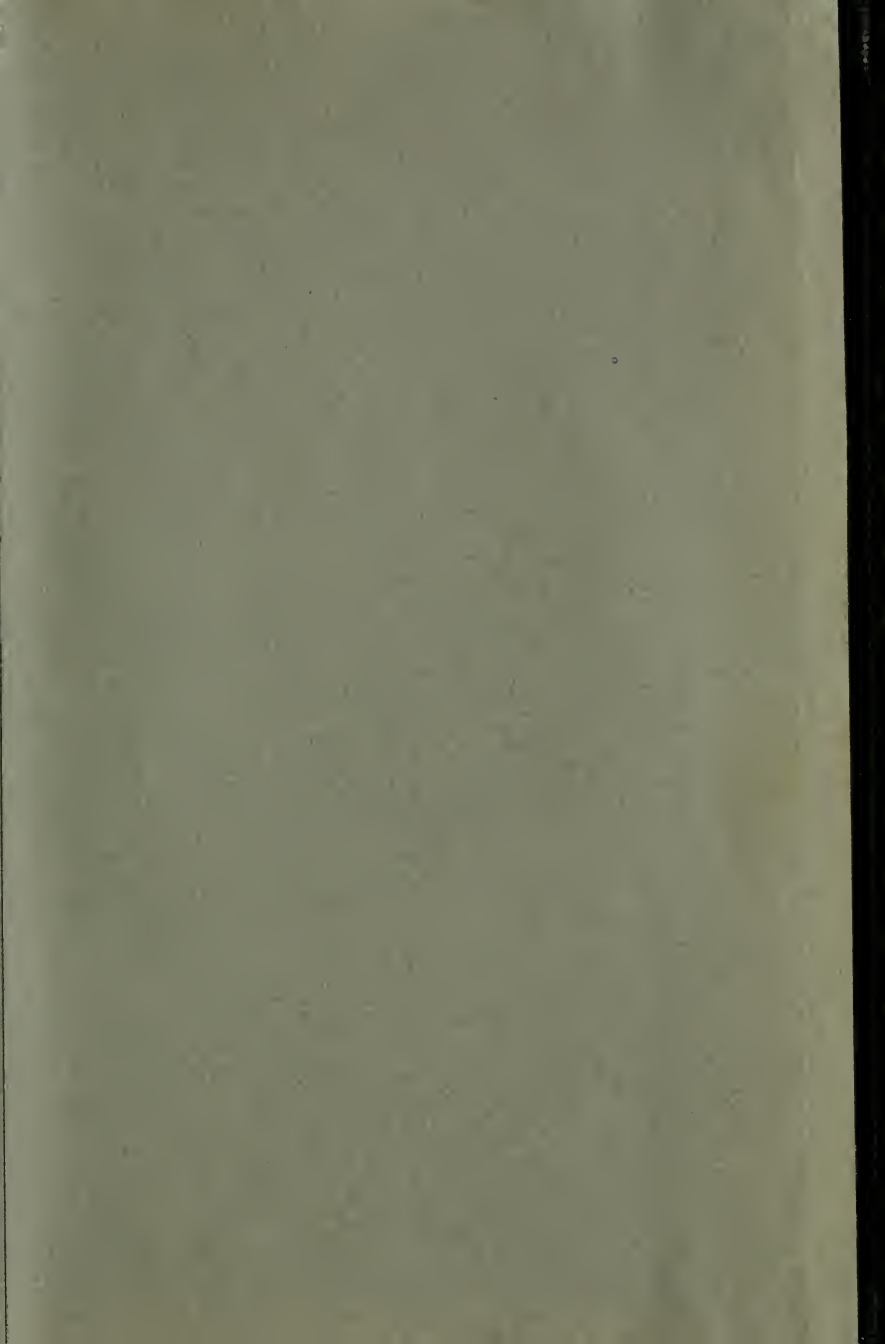
Zu v. Verdy v. Gossier, Studien über Truppenführung I. 4.

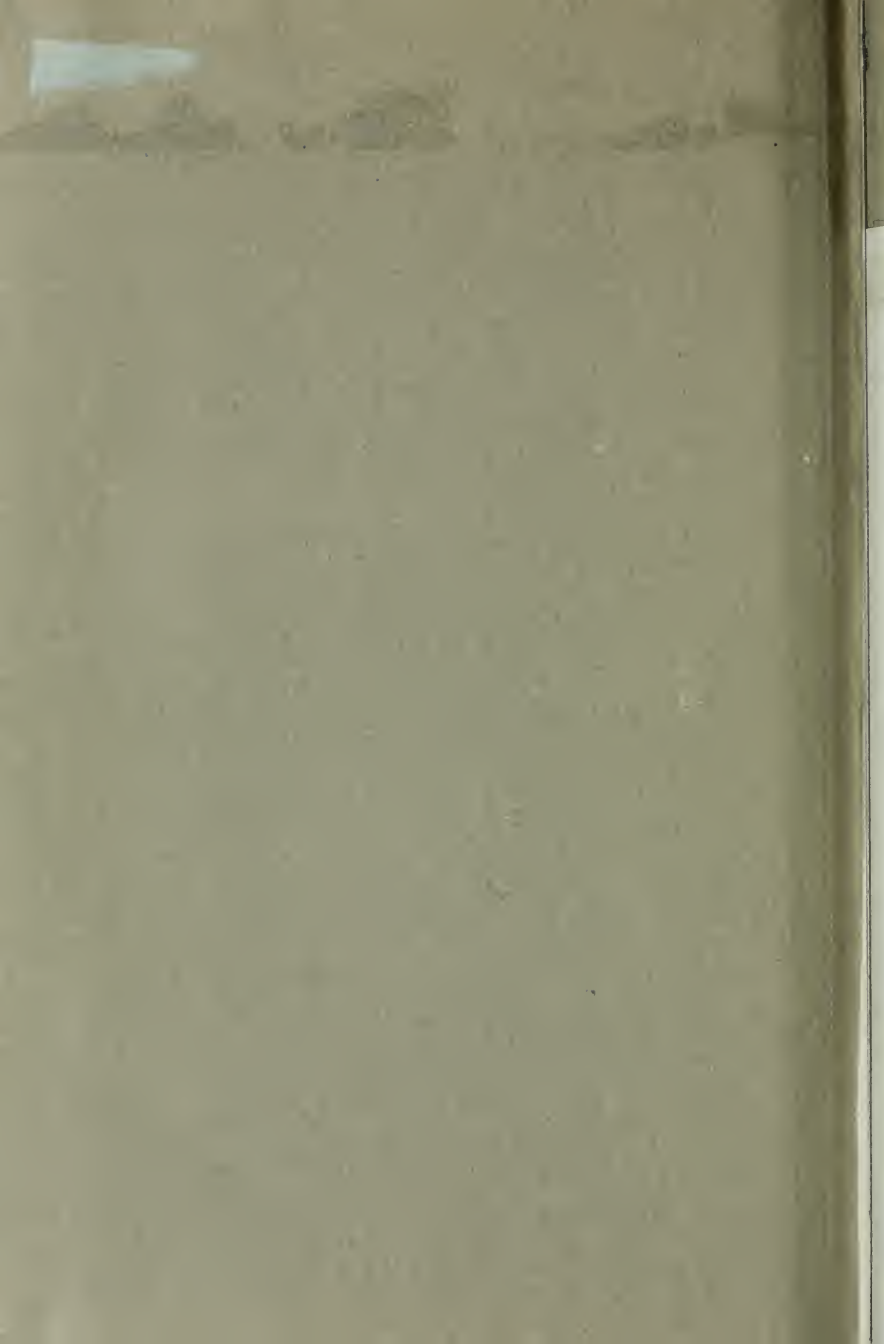


am Abend des 27. Juni.

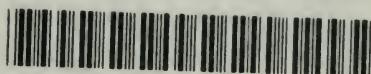








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